APPENDIX G

MONITORING WELL DEVELOPMENT LOGS

- G-1 URSGWC MONITORING WELL DEVELOPMENT LOGS
- G-2 HARDING ESE MONITORING WELL DEVELOPMENT LOGS

G-1

URSGWC MONITORING WELL DEVELOPMENT LOGS

URS Greiner Woodward Clyde MONITORING WELL Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC1-1S PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 2-12 ft Date Installed: 03/22/1999 Casing Diameter: 2 inches Depth of Well (ft): 12 SURGE DATA Depth (ft): 7 Pre-Surge Sample 04/19/1999 11:00 Conductivity: 0.73 Date and Time: Temperature (°C): 12.8 DTW(ft):* 5.40 -10 DTB(ft):** 12.10 Turbidity (NTUs): 5.6 04/19/1999 11:00 pH: Surge Date and Time: Surge Method: Depth (ft): 7 Post-Surge Sample Conductivity: 0.75 Date and Time: 04/19/1999 11:30 12.8 Temperature: Comments: Turbidity (NTU's): 2 pH: 5.72 **PURGE DATA** Volume of Water in Casing (g): Date and Time: 04/19/1999 11:40 1.09 5 Casing Volumes (g): 5.45 DTW(ft): 5.40 Height of Water Column (ft): 6.68 Purge Method: Submersible pump Gallons Purged Time Temperature Conductivity Turbidity (NTUs) pΗ Comments 12.7 0.707 -10 5.78 50 11:45 12.5 0.695 -10 5.82 55 11:48 11:51 12.5 0.694 -10 5.83 64 12.3 0.689 -10 5.85 74 11:54 5.40 ft Total gallons purged: 75 DTW after purge: Ricardo Colón Inspector: *DTW: depth to water (from top of riser) **DTB: depth to bottom (from top of riser)

URS Greiner Woodward Clyde MONITORING WELL Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC2-1D PROJ. NO./NAME: FOR98104/SAEP Screened Interval: Date Installed: 04/14/1999 140 - 150 ft Depth of Well (ft): 150 Casing Diameter: 2 inches SURGE DATA Pre-Surge Sample Depth (ft): 147 Date and Time: 04/27/1999 13:20 Conductivity: 3.21 15.1 DTW(ft):* 3.43 Temperature (°C): DTB(ft):** 147.75 Turbidity (NTUs): 60 7.23 Surge Date and Time: 04/27/1999 13:30 pH: Surge block Surge Method: Depth (ft): 147 Post-Surge Sample Date and Time: 04/27/1999 14:45 Conductivity: 11.9 17 Comments: Temperature: -10 Turbidity (NTU's): 6.89 pH: PURGE DATA 04/27/1999 Date and Time: 14:45 Volume of Water in Casing (g): 22.5 DTW(ft): 9.95 5 Casing Volumes (g): 112.5 Height of Water Column (ft): Purge Method: Submersible pump 137.8 Time Temperature Conductivity Turbidity (NTUs) pΗ Gallons Purged Comments 15:25 17.6 350 350 6.84 55 17.4 32.6 6.78 65 15:37 245 17.7 32.7 210 6.77 75 15:45 15:51 17.6 32.8 6.80 85 181 32.9 6.80 90 15:58 17.5 173 32.9 6.77 100 16:05 17.4 156 16:14 17.4 33.4 166 6.80 111 16:22 17.7 33.2 161 6.80 120 23.10' (4.66' after 30 minutes) DTW after purge: Total gallons purged: 125 Inspector: Ricardo Colón

**DTB: depth to bottom (from top of riser)

*DTW: depth to water (from top of riser)

MONITORING WELL URS Greiner Woodward Clyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC2-11 PROJ. NO./NAME: FOR98104/SAEP 45 - 55 ft Screened Interval: 04/08/1999 Date Installed: Casing Diameter: 2 inches Depth of Well (ft): 55 SURGE DATA 48 Depth (ft): Pre-Surge-Sample Conductivity: 1.41 Date and Time: 04/27/1999 14:30 Temperature (°C): 14.6 DTW(ft):* 4.66 319 52.85 Turbidity (NTUs): DTB(ft):** 6.59 04/27/1999 14:50 pH: Surge Date and Time: Surge Method: Surge block Depth (ft): 52 Post-Surge Sample 14.5 Conductivity: Date and Time: 04/27/1999 16:25 19.5 Temperature: Comments: 999 Turbidity (NTU's): 6.91 **PURGE DATA** Volume of Water in Casing (g): 7.86 04/27/1999 Date and Time: 39.29 4.70 5 Casing Volumes (g): DTW(ft): Submersible pump 48.15 Purge Method: Height of Water Column (ft): Gallons Purged Comments Temperature Conductivity Turbidity (NTUs) pΗ Time 6.51 20 17.1 -10 16.5 16:35 499 6.41 30 16:42 15.9 16.9 16:50 15.6 18.8 215 6.35 55 6.31 60 18.5 254 17:01 15.7 6.36 65 28.5 216 17:05 15.7 70 14.97' (5.15' after 10 minutes) Total gallons purged: DTW after purge: Ricardo Colón Inspector:

*DTW: depth to water (from top of riser)

URS Greiner Woodward Clyde MONITORING WELL Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC2-1S PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 2 - 12 ft Date Installed: 04/09/1999 Casing Diameter: 2 inches Depth of Well (ft): 12 SURGE DATA Depth (ft): 6 Pre-Surge Sample Date and Time: 04/21/1999 9:55 Conductivity: 0.405 Temperature: 11.0 DTW(ft):* 4.11 999 11.55 Turbidity (NTUs): DTB(ft):** 10:00 4.88 04/21/1999 pH: Surge Date and Time: Surge Method: Surge block Depth (ft): 11 Post-Surge Sample Conductivity: 0.946 Date and Time: 04/21/1999 10:45 Temperature (°C): 10.3 Comments: 999 Turbidity (NTU's): 4.67 pH: **PURGE DATA** Volume of Water in Casing (g): Date and Time: 04/21/1999 10:45 1.2 5 Casing Volumes (g): DTW(ft): 4.18 6.0 7.37 Purge Method: Submersible pump Height of Water Column (ft): Gallons Purged Comments Time Temperature Conductivity Turbidity (NTUs) pH* 10:55 10.1 0.531 -10 4.03 22 *pH readings are no reliable 9.8 0.543 -10 4.08 28 11:00 11:05 9.7 0.563 -10 4.03 36 The pH sensor was later tested 9.9 0.571 -10 4.03 45 on tap water (after calibration), 11:10 yielding results overly low 52 DTW after purge: 4.27 ft Total gallons purged: Ricardo Colón Inspector: *DTW: depth to water (from top of riser) **DTB: depth to bottom (from top of riser)

URS Greiner Woodward Clyde MONITORING WELL Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC2-2D PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 52 - 62 ft Date Installed: 04/01/1999 Depth of Well (ft): 62 Casing Diameter: 2 inches **SURGE DATA** Pre-Surge Sample Depth (ft): 55 Date and Time: 04/26/1999 10:30 Conductivity: 16.8 DTW(ft):* 4.34 16.7 Temperature (°C): 61.25 20 DTB(ft):** Turbidity (NTUs): Surge Date and Time: 04/26/1999 10:35 6.75 pH: Surge Method: Surge block Post-Surge Sample Depth (ft): 60 Date and Time: 04/26/1999 11:30 Conductivity: 23.1 Comments: Temperature: 16.9 Turbidity (NTU's): -10 6.85 pH: **PURGE DATA** 04/26/1999 Volume of Water in Casing (g): Date and Time: 9.24 DTW(ft): 4.35 5 Casing Volumes (g): 46.2 Height of Water Column (ft): Purge Method: 56.9 Submersible pump Temperature Conductivity Turbidity (NTUs) Gallons Purged Comments Time pН 40 16.3 27.8 425 6.78 11:40 16.4 60 11:45 27.7 -10 6.79 11:48 16.5 28.2 -10 6.77 80 100 11:51 16.3 28.3 -10 6.81 DTW after purge: 5.85 ft Total gallons purged: 105 Ricardo Colón Inspector: *DTW: depth to water (from top of riser) **DTB: depth to bottom (from top of riser)

MONITORING WELL URS Greiner Woodward Clyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC2-21 PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 45 - 55 ft 03/30/1999 Date Installed: 2 inches Casing Diameter: Depth of Well (ft): 55 SURGE DATA Depth (ft): 50 Pre-Surge Sample Conductivity: 4.2 04/21/1999 13:00 Date and Time: 14.0 Temperature (°C): DTW(ft):* 4.83 Turbidity (NTUs): 657 51.43 DTB(ft):** 4.19 13:25 pH: 04/21/1999 Surge Date and Time: Surge block Surge Method: 52 Depth (ft): Post-Surge Sample Conductivity: 11.6 14:20 Date and Time: 04/21/1999 14.3 Temperature: Comments: 999 Turbidity (NTU's): 4.70 pH: **PURGE DATA** Volume of Water in Casing (g): 7.61 Date and Time: 04/21/1999 14:20 38.04 5 Casing Volumes (g): DTW(ft): 4.82 Submersible pump 46.6 Purge Method: Height of Water Column (ft): Gallons Purged Comments pH* Time Temperature Conductivity Turbidity (NTUs) *pH readings are no reliable 14.5 11.8 -10 4.64 70 14:29 90 4.63 -10 14:32 14.4 12.1 105 The pH sensor was later tested 4.65 14:36 14.4 11.9 -10 120 on tap water (after calibration), 12 -10 4.67 14.5 14:40 yielding results overly low 4.47 ft Total gallons purged: 125 DTW after purge: Ricardo Colón Inspector:

*DTW: depth to water (from top of riser)

MONITORING WELL URS Greiner Woodward Clyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC2-3D PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 74.5 - 84.5 ft Date Installed: 04/13/1999 2 inches Depth of Well (ft): 85 Casing Diameter: SURGE DATA Depth (ft): 80 Pre-Surge Sample 0.463 04/27/1999 10:30 Conductivity: Date and Time: 15.1 Temperature: DTW(ft):* 4.61 Turbidity (NTUs): 41 DTB(ft):** 84.05 6.57 10:35 04/27/1999 pH: Surge Date and Time: Surge Method: Surge block 84 Post-Surge Sample Depth (ft): Conductivity: 12.2 04/27/1999 Date and Time: 16.5 Temperature (°C): Comments: Turbidity (NTU's): -10 6.54 pH: PURGE DATA Volume of Water in Casing (g): 12.8 Date and Time: 04/27/1999 5 Casing Volumes (g): 64.1 DTW(ft): 5.47 Purge Method: Submersible pump 78.58 Height of Water Column (ft): Conductivity Turbidity (NTUs) pН Gallons Purged Comments Time Temperature 55 6.24 11.7 65 11:40 16.6 70 6.24 11:43 16.3 17.9 12 11:46 16.3 18.2 14 6.26 80 90 6.26 11:49 16.3 18.4 13 100 6.24 11:52 16.4 18.5 13 5.20 ft Total gallons purged: 110 DTW after purge: Ricardo Colón Inspector:

*DTW: depth to water (from top of riser)

MONITORING WELL URS Greiner Woodward Chyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC2-31 PROJ. NO./NAME: FOR98104/SAEP 45 - 55 ft Screened Interval: 03/26/1999 Date Installed: 2 inches Depth of Well (ft): 55 Casing Diameter: SURGE DATA Depth (ft): Pre-Surge Sample 45 0.662 04/20/1999 14:25 Conductivity: Date and Time: Temperature: 12.0 DTW(ft):* 3.20 Turbidity (NTUs): 130 53.80 DTB(ft):** 6.42 04/20/1999 14:25 pH: Surge Date and Time: Surge block Surge Method: 55 Depth (ft): Post-Surge Sample 7.7 15:15 Conductivity: Date and Time: 04/20/1999 12.8 Temperature (°C): Comments: Turbidity (NTU's): 466 6.28 pH: PURGE DATA Volume of Water in Casing (g): 8.45 Date and Time: 04/20/1999 15:20 5 Casing Volumes (g): 42.27 DTW(ft): 3.20 Submersible pump 51.8 Purge Method: Height of Water Column (ft): Turbidity (NTUs) Gallons Purged Comments Time Temperature Conductivity pΗ 36 6.20 15:27 13.8 11.7 -10 47 15:32 14.0 11.5 -10 6.23 15:35 14.0 11.5 -10 6.28 55 65 -10 6.28 15:38 14.0 11.6 75 15:41 14.0 11.6 -10 6.29 -10 6.29 90 14.2 11.6 15:44 DTW after purge: 3.35 ft Total gallons purged: 95 Ricardo Colón Inspector: **DTB: depth to bottom (from top of riser)

*DTW: depth to water (from top of riser)

URS Grei Federal	iner Woodwar Services	d Clyde			MONITORING WELL DEVELOPMENT LOG					
WELL N	UMBER:	WC2-3S								
PROJ. N	O./NAME: FOR	98104/SAEP								
Date Insta	lled:	03/30/1999			Screened Interval:	-	- 12 ft			
Depth of \	Well (ft):	12			Casing Diameter:	2	inches			
			SURGI	E DATA						
Pre-Surge	Sample				Depth (ft):	9				
Date and		04/21/1999	12:40		Conductivity:	9.3				
DTW(ft):		5.75			Temperature (°C):	10.7				
DTB(ft):*		11.71			Turbidity (NTUs):	999				
Surge Dat	te and Time:	04/21/1999	12:40		pH:	5.17				
					Surge Method:	Surge block				
Post-Surg	e Sample			***************************************	Depth (ft):	12				
					-	0.40				
Date and		04/21/1999	13:25		Conductivity:	8.69				
Comments:					Temperature:	9.9				
					Turbidity (NTU's): pH:	999 4.43				
					P					
			PURG	E DATA						
Date and	Time:	04/21/1999			Volume of Water is		0.97			
DTW(ft):		5.75			5 Casing Volumes	(g):	4.86			
Height of	Water Column ((ft):	5.96		Purge Method:		Submersible pump			
Time	Temperature	Conductivity	Turbidity (NTUs)	pН	Gallons Purged	C	omments			
13:34	9.8	7.8	-10	5.06	24					
13:40	9.7	7.32	-10	5.11	36					
13:44	9.7	7.07	-10	5.03	43					
13:47	9.7	6.92	-10	5.13	50	}				
13:51	9.6	6.81	-10	5.16	58					
13:55	9.6	6.64	-10	5.18	65					
13:58	9.6	6.56	-10	5.05	72					
14:01	9.6	6.66	-10	6.11	80					
14:04	9.6	6.52	-10	5.15	88					
14:07	9.6	6.5	-10	5.12	94					
			·							
DTW aft	er purge:	5.66 ft		1	Total gallons purge	ed:	100			
Inspector	-	Ricardo Colón	•			-				
	pth to water (from to				**DTB: depth to botton	n (from top of ri	ser)			

MONITORING WELL URS Greiner Woodward Clyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC2-41 PROJ. NO./NAME: FOR98104/SAEP 10/26/1999 Screened Interval: 25 - 35ft Date Installed: Casing Diameter: 2 inches 35 ft Depth of Well (ft): SURGE DATA 28 Depth (ft): Pre-Surge Sample 0.966 Date and Time: 11/04/1999 10:58 Conductivity: 11.7 Temperature (°C): DTW(ft):* 4.80 Turbidity (NTUs): 999 DTB(ft):** 33.22 11/04/1999 10:58 pH: 6.76 Surge Date and Time: Surge block Surge Method: 28 Depth (ft): Post-Surge Sample Conductivity: 1.73 Date and Time: 11/04/1999 11:00 14.8 Temperature: Comments: 999 Turbidity (NTU's): 6.72 **PURGE DATA** Volume of Water in Casing (g): Date and Time: 11/04/1999 9.3 5 Casing Volumes (g): 46.4 4.80 DTW(ft): Height of Water Column (ft): Purge Method: Submersible pump 28.42 Gallons Purged Comments Conductivity Turbidity (NTUs) pΗ Time Temperature 35 11:00 14.5 1.87 363 6.56 1.75 320 6.66 40 11:02 15.7 45 309 6.69 13:44 15.2 1.73 50 1.70 298 6.69 13:47 15.6 Total gallons purged: 55 DTW after purge: 4.81 ft Steve G. Vallianos Inspector: **DTB: depth to bottom (from top of riser) *DTW: depth to water (from top of riser)

	iner Woodwar Services	d Clyde				RING WELL	
WELL N	•	WC2-4S	•	•	DEVELOP	MENT LO	3
	O./NAME: FOR						
Date Insta		03/22/1999			Screened Interval:	2 ·	- 12 ft
Depth of V		12			Casing Diameter:	<u>2</u> i	nches
1	` ′						
			SURGE	E DATA	•		
Pre-Surge	Sample				Depth (ft):	7	
Date and	Time:	04/19/1999	15:45		Conductivity:	0.230	
DTW(ft):		5.01			Temperature:	12.7	
DTB(ft):*		11.80			Turbidity (NTUs):	-10	
	e and Time:	04/19/1999	15:45		pH:	6.71	
					Surge Method:	Surge block	
Post-Surg	e Sample				Depth (ft):	7	
Doto and	Times	04/19/1999	16:30		Conductivity:	0.249	
Date and Time: Comments:		04/13/13/3	10.50		Temperature (°C):		
					Turbidity (NTU's)		
					pH:	6.85	
			PURG	E DATA			
Date and		04/19/1999	16:30		Volume of Water i		1.1
DTW(ft):		5.03			5 Casing Volumes	(g):	5.5
Height of	Water Column ((ft):	6.77		Purge Method:		Submersible pump
Time	Temperature	Conductivity	Turbidity (NTUs)	pН	Gallons Purged		omments
16:40	11.7	0.222	13	6.68	17`	i .	ems to be too cloud
16:45	11.7	0.222	-10	6.65	30	for a 13 NTU	J reading
16:50	11.6	0.221	-10	6.67	35		
16:54	11.6	0.218	-10	6.66	50		•
		,					
DTW aft	er purge:	5.05 ft			Total gallons purg	ed:	55
Inspector	-	Ricardo Colón			Town Parions bare	,	
	oth to water (from to				**DTB: depth to botto	om (from top of ri	ser)
		<u> </u>					

MONITORING WELL URS Greiner Woodward Clyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC2-51 PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 30 - 40 ft Date Installed: 10/25/1999 2 inches Casing Diameter: Depth of Well (ft): 40 ft SURGE DATA 35 Depth (ft): Pre-Surge Sample Conductivity: 16 11/04/1999 9:40 Date and Time: Temperature (°C): 12.9 7.02 DTW(ft):* 999 Turbidity (NTUs): 39.89 DTB(ft):** 6.58 9:40 pH: 11/04/1999 Surge Date and Time: Surge Method: Surge block Depth (ft): 35 Post-Surge Sample 17.1 Conductivity: 11/04/1999 9:43 Date and Time: 14 Temperature: Comments: 999 Turbidity (NTU's): 6.65 **PURGE DATA** Volume of Water in Casing (g): 10.73 11/04/1999 Date and Time: 53.66 7.30 5 Casing Volumes (g): DTW(ft): Purge Method: Submersible pump Height of Water Column (ft): 32.87 Gallons Purged Comments Conductivity Turbidity (NTUs) pΗ Time Temperature 6.61 75 999 17.4 9:45 12.5 999 80 17.4 6.61 9:46 13.3 13.8 17.4 999 6.61 85 9:47 6.71 90 999 9:49 13.9 17.5 90 Total gallons purged: DTW after purge: 7.02 ft Steve G. Vallianos

**DTB: depth to bottom (from top of riser)

Inspector:

*DTW: depth to water (from top of riser)

MONITORING WELL URS Greiner Woodward Clyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC2-5S PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 2 - 12 ft Date Installed: 03/23/1999 12 Casing Diameter: 2 inches Depth of Well (ft): SURGE DATA Depth (ft): Pre-Surge Sample Conductivity: 0.160 Date and Time: 04/20/1999 9:40 12.0 7.26 Temperature: DTW(ft):* 999 Turbidity (NTUs): 11.82 DTB(ft):** 6.05 Surge Date and Time: 04/20/1999 9:40 pH: Surge block Surge Method: Depth (ft): Post-Surge Sample 0.170 Conductivity: 10:25 Date and Time: 04/20/1999 11.5 Temperature (°C): Comments: Turbidity (NTU's): 999 5.7 pH: **PURGE DATA** Volume of Water in Casing (g): 0.75 04/20/1999 10:25 Date and Time: 5 Casing Volumes (g): 3.77 7.20 DTW(ft): Submersible pump Purge Method: Height of Water Column (ft): 4.62 Conductivity Gallons Purged Comments Turbidity (NTUs) pН Temperature Time 20 5.73 0.17 -10 10:35 11.6 38 10:39 11.6 0.177 -10 5.72 5.76 36 -10 11.5 0.178 10:43 5.6 44 0.179 -10 10:47 11.4 48 10:50 11.6 0.179 -10 5.61 5.57 52 -10 10:53 11.6 0.176 56 5.57 -10 10:56 11.6 0.179 Total gallons purged: 60 DTW after purge: 7.22 ft Ricardo Colón Inspector: *DTW: depth to water (from top of riser) **DTB: depth to bottom (from top of riser)

MONITORING WELL URS Greiner Woodward Clyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC2-61 PROJ. NO./NAME: FOR98104/SAEP 40 - 50 ft Screened Interval: Date Installed: 10/27/1999 2 inches 50 ft Casing Diameter: Depth of Well (ft): SURGE DATA Depth (ft): 41 Pre-Surge Sample 8.49 Conductivity: Date and Time: 11/04/1999 11:47 15 Temperature (°C): 4.54 DTW(ft):* 999 Turbidity (NTUs): 46.99 DTB(ft):** 6.35 pH: Surge Date and Time: 11/04/1999 11:47 Surge block Surge Method: 41 Depth (ft): Post-Surge Sample 10.9 Conductivity: Date and Time: 11/04/1999 11:59 15.4 Temperature: Comments: Turbidity (NTU's): 999 6.76 pH: PURGE DATA Volume of Water in Casing (g): 13.86 11/04/1999 Date and Time: 69.30 5 Casing Volumes (g): 4.54 DTW(ft): Purge Method: Submersible pump Height of Water Column (ft): 42.45 Gallons Purged Comments Conductivity Turbidity (NTUs) pΗ Temperature Time 55 999 6.67 11:56 14.8 11.3 60 15.3 11.4 999 6.7 11:57 999 6.73 65 11.5 11:59 15 70 999 6.71 11.5 12:00 15.2 75 Total gallons purged: DTW after purge: 4.81 ft Steve G. Vallianos Inspector: **DTB: depth to bottom (from top of riser) *DTW: depth to water (from top of riser)

MONITORING WELL URS Greiner Woodward Clyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC3-1D PROJ. NO./NAME: FOR98104/SAEP 75 - 85 ft Screened Interval: Date Installed: 11/02/1999 Casing Diameter: 2 inches 85 ft Depth of Well (ft): SURGE DATA Depth (ft): 80 Pre-Surge Sample Conductivity: 3.10 Date and Time: 11/04/1999 14:22 Temperature (°C): 21.5 4.00 DTW(ft):* 967 Turbidity (NTUs): DTB(ft):** 84.50 6.96 11/04/1999 14:22 pH: Surge Date and Time: Surge block Surge Method: 80 Depth (ft): Post-Surge Sample 13.3 Conductivity: Date and Time: 11/04/1999 14:40 14.2 Temperature: Comments: 999 Turbidity (NTU's): 6.64 pH: **PURGE DATA** Volume of Water in Casing (g): 26.28 11/04/1999 14:40 Date and Time: 131.42 5 Casing Volumes (g): 4.00 DTW(ft): Purge Method: Submersible pump Height of Water Column (ft): 80.5 Comments Gallons Purged Turbidity (NTUs) Time Temperature Conductivity pΗ 100 13.8 13.9 999 6.79 15:14 6.63 105 14.3 999 15:16 14.1 110 6.64 15.5 992 15:18 13.7 115 6.54 15:19 14.1 15.8 559 6.66 120 16.2 255 15:20 14.0 125 6.66 16 135 15:21 12.8 130 136 6.58 15:22 13.4 16.3 6.55 135 13.6 16.5 136 15:24 140 6.61 136 15:27 13.8 16.8 145 Total gallons purged: DTW after purge: 4.02 Steve G. Vallianos Inspector:

*DTW: depth to water (from top of riser)

MONITORING WELL URS Greiner Woodward Clyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC3-11 PROJ. NO./NAME: FOR98104/SAEP 30 - 40 ft Screened Interval: Date Installed: 11/03/1999 2 inches 40 Casing Diameter: Depth of Well (ft): SURGE DATA 35 Depth (ft): Pre-Surge Sample Conductivity: 3.36 13:29 Date and Time: 11/04/1999 15.5 Temperature (°C): 6.90 DTW(ft):* 102 Turbidity (NTUs): 38.90 DTB(ft):** 7.38 pH: Surge Date and Time: 11/04/1999 13:29 Surge Method: Surge block 35 Depth (ft): Post-Surge Sample Conductivity: 3.42 13:36 11/04/1999 Date and Time: 19.1 Temperature: Comments: Turbidity (NTU's): 275 7.47 pH: **PURGE DATA** Volume of Water in Casing (g): 10.81 13:38 11/04/1999 Date and Time: 54.04 5 Casing Volumes (g): 6.90 DTW(ft): Submersible pump Purge Method: Height of Water Column (ft): 33.1 Comments Turbidity (NTUs) Gallons Purged pН Conductivity Time Temperature 30 7.45 3.42 100 13:41 14.3 35 14.3 3.41 35 7.50 13:47 7.44 15 40 3.37 14.3 13:52 45 15 7.47 3.37 14.3 13:57 50 14.3 3.38 14 7.40 14:03 55 Total gallons purged: 6.90 ft DTW after purge: Steve G. Vallianos Inspector: **DTB: depth to bottom (from top of riser) *DTW: depth to water (from top of riser)

MONITORING WELL URS Greiner Woodward Chyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC3-2D PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 53 - 63 ft Date Installed: 10/29/1999 Casing Diameter: 2 inches 63 ft Depth of Well (ft): SURGE DATA Depth (ft): 62 Pre-Surge Sample 1.19 Conductivity: 9:40 Date and Time: 11/05/1999 14.3 Temperature (°C): 2.85 DTW(ft):* 496 Turbidity (NTUs): 62.40 DTB(ft):** 7.29 Surge Date and Time: 11/05/1999 9:40 pH: Surge Method: Surge block Depth (ft): 60 Post-Surge Sample Conductivity: 7.19 Date and Time: 11/05/1999 9:43 Temperature: 14.1 Comments: 497 Turbidity (NTU's): 6.43 pH: **PURGE DATA** Volume of Water in Casing (g): 19.44 11/05/1999 9:46 Date and Time: 97.22 5 Casing Volumes (g): 2.85 DTW(ft): Height of Water Column (ft): 59.55 Purge Method: Submersible pump Gallons Purged Comments Turbidity (NTUs) Conductivity pН Temperature Time 65 8.76 454 6.39 9:47 14.3 70 14.3 8.85 114 6.36 9:48 6.45 75 114 9.04 9:49 14.3 6.36 80 200 9:50 14.3 9.10 14.3 9.21 116 6.40 85 9:51 6.36 90 14.3 9.30 116 9:52 6.35 95 9:53 14.3 9.35 113 Total gallons purged: 100 DTW after purge: 2.95 ft Steve G. Vallianos Inspector:

*DTW: depth to water (from top of riser)

MONITORING WELL URS Greiner Woodward Clyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC3-21 PROJ. NO./NAME: FOR98104/SAEP 30 - 40 ft Date Installed: 11/03/1999 Screened Interval: Casing Diameter: 2 inches 40 Depth of Well (ft): SURGE DATA Depth (ft): 39 Pre-Surge Sample 0.406 Conductivity: Date and Time: 11/05/1999 8:43 Temperature (°C): 11.9 DTW(ft):* 2.85 Turbidity (NTUs): 117 DTB(ft):** 39.01 6.24 Surge Date and Time: 11/05/1999 8:43 pH: Surge block Surge Method: Depth (ft): Post-Surge Sample 0.827 Conductivity: 8:55 Date and Time: 11/04/1999 Temperature: 12.9 Comments: Turbidity (NTU's): 113 6.45 pH: **PURGE DATA** Volume of Water in Casing (g): 11.81 Date and Time: 11/05/1999 8:55 59.00 5 Casing Volumes (g): 2.85 DTW(ft): Submersible pump 36.16 Purge Method: Height of Water Column (ft): Comments Gallons Purged Conductivity Turbidity (NTUs) pН Time Temperature 40 8:57 14.6 1.42 189 6.63 114 6.63 45 14.5 1.53 8:59 50 77 6.64 14.6 1.56 9:01 55 107 6.64 9:03 14.5 1.52 49 6.64 60 14.7 1.59 9:05 65 91 6.69 14.5 1.61 9:07 70 9:09 14.6 1.57 100 6.65 6.69 75 109 9:11 14.5 1.61 70 Total gallons purged: 3.99 ft DTW after purge: Steve G. Vallianos Inspector: **DTB: depth to bottom (from top of riser) *DTW: depth to water (from top of riser)

URS Greiner Woodward Clyde MONITORING WELL Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC5-1D PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 74.5 - 84.5 ft Date Installed: 04/16/1999 85 Casing Diameter: 2 inches Depth of Well (ft): SURGE DATA Depth (ft): 80 Pre-Surge Sample 0.396 Conductivity: Date and Time: 04/26/1999 14:55 14.0 DTW(ft):* Temperature: 5.50 Turbidity (NTUs): -10 DTB(ft):** 81.40 7.23 Surge Date and Time: 04/26/1999 15:00 pH: Surge Method: Surge block Depth (ft): Post-Surge Sample 20.7 Conductivity: Date and Time: 04/26/1999 16:00 Temperature (°C): 15.1 Comments: Turbidity (NTU's): 999 6.89 pH: **PURGE DATA** Volume of Water in Casing (g): 04/26/1999 16:00 12.4 Date and Time: 5 Casing Volumes (g): 62.0 5.45 DTW(ft): Height of Water Column (ft): 75.95 Purge Method: Submersible pump Gallons Purged Comments Temperature Conductivity Turbidity (NTUs) pН Time 15 30.2 30 6.78 55 16:12 16:16 15 30.9 145 6.76 90 100 * Horiba U-10 Unit "died" 15 32.5 N/A* 16:20 The battery needed to be replaced Total gallons purged: 115 DTW after purge: 5.45 ft Inspector: Ricardo Colón *DTW: depth to water (from top of riser) **DTB: depth to bottom (from top of riser)

URS Greiner Woodward Clyde MONITORING WELL Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC5-1S PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 2 - 12 ft 03/22/1999 Date Installed: Casing Diameter: 2 inches Depth of Well (ft): 12 SURGE DATA Depth (ft): 5 Pre-Surge Sample Conductivity: 0.257 Date and Time: 13:00 04/19/1999 11.9 Temperature: DTW(ft):* 2.03 DTB(ft):** 11.35 Turbidity (NTUs): 441 6.62 13:00 04/19/1999 pH: Surge Date and Time: Surge block Surge Method: Depth (ft): Post-Surge Sample Conductivity: 0.236 04/19/1999 13:45 Date and Time: 12.6 Temperature (°C): Comments: 999 Turbidity (NTU's): 6.92 pH: **PURGE DATA** Volume of Water in Casing (g): Date and Time: 04/19/1999 13:45 1.52 7.61 2.03 5 Casing Volumes (g): DTW(ft): Purge Method: Submersible pump Height of Water Column (ft): 9.32 Temperature Conductivity Turbidity (NTUs) pΗ Gallons Purged Comments Time 40 11.5 0.225 -10 6.75 13:55 44 0.229 6.7 13:58 11.3 -10 -10 6.73 50 14:03 11.4 0.22114:05 11.2 0.222 -10 6.78 55 DTW after purge: 2.03 ft Total gallons purged: 55 Ricardo Colón Inspector:

*DTW: depth to water (from top of riser)

MONITORING WELL URS Greiner Woodward Chyde Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC5-21 PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 30 - 40 ft Date Installed: 04/16/1999 2 inches Casing Diameter: 40 Depth of Well (ft): SURGE DATA 35 Depth (ft): Pre-Surge Sample Conductivity: 2.15 04/26/1999 13:05 Date and Time: 14.9 Temperature: DTW(ft):* 4.70 300 39.10 Turbidity (NTUs): DTB(ft):** 6.81 pH: 13:10 04/26/1999 Surge Date and Time: Surge block Surge Method: Depth (ft): Post-Surge Sample 2.10 Conductivity: 14:10 04/26/1999 Date and Time: 16.0 Temperature (°C): Comments: 999 Turbidity (NTU's): 6.37 pH: **PURGE DATA** Volume of Water in Casing (g): 5.61 04/26/1999 14:10 Date and Time: 28.1 5 Casing Volumes (g): 4.70 DTW(ft): Submersible pump Purge Method: 34.4 Height of Water Column (ft): Comments Gallons Purged Turbidity (NTUs) pΗ Conductivity Time Temperature 65 -10 6.42 2.32` 14:18 15.7 90 6.44 15.6 2.36 -10 14:22 120 6.47 15.7 2.36 -10 14:26 -10 6.44 140 2.35 15.7 14:29 150 4.75 ft Total gallons purged: DTW after purge: Ricardo Colón Inspector: **DTB: depth to bottom (from top of riser) *DTW: depth to water (from top of riser)

URS Greiner Woodward Clyde MONITORING WELL Federal Services **DEVELOPMENT LOG** WELL NUMBER: WC5-2S PROJ. NO./NAME: FOR98104/SAEP Screened Interval: 2 - 12 ft 03/23/1999 Date Installed: 2 inches Casing Diameter: 12 Depth of Well (ft): SURGE DATA 7 Depth (ft): Pre-Surge Sample Conductivity: 0.275 14:20 Date and Time: 04/19/1999 11.7 Temperature: DTW(ft):* 5.70 999 11.90 Turbidity (NTUs): DTB(ft):** 5.97 14:20 pH: 04/19/1999 Surge Date and Time: Surge block Surge Method: Depth (ft): Post-Surge Sample Conductivity: 0.265 15:05 04/19/1999 Date and Time: Temperature (°C): 11.8 Comments: 999 Turbidity (NTU's): 5.97 pH: PURGE DATA Volume of Water in Casing (g): 1.01 04/19/1999 Date and Time: 15:05 5.05 5 Casing Volumes (g): 5.71 DTW(ft): Submersible pump Purge Method: Height of Water Column (ft): 6.19 Gallons Purged Comments Temperature Conductivity Turbidity (NTUs) pН Time 6.26 17 Water has a very clear 10.4 0.265 -10 15:15 25 6.24 appearance -10 0.261 15:18 10.4 40 6.25 0.265 -10 15:21 10.4 47 0.262 -10 6.24 10.2 15:25 50 Total gallons purged: DTW after purge: 5.71 ft Ricardo Colón Inspector: **DTB: depth to bottom (from top of riser) *DTW: depth to water (from top of riser)

URS Grei Federal	iner Woodwart Services	d Clyde			MONITOR DEVELOP	RING WELI MENT LOC	
WELL N		WC5-3S					
	O./NAME: FOR				Commence of Times were 1	2	12 6
Date Insta		04/15/1999			Screened Interval: Casing Diameter:	***************************************	- 12 ft inches
Depth of V	Well (ft):	12			Casing Diameter.	4.	inches
			SURGE	E DATA			
Pre-Surge	Sample				Depth (ft):	11	
Date and	Time:	04/26/1999	13:35		Conductivity:	0.556	
DTW(ft):		4.75			Temperature:	13.3	
DTB(ft):*		11.67			Turbidity (NTUs):	999	· · · · · · · · · · · · · · · · · · ·
Surge Dat	te and Time:	04/26/1999	14:00		pH:	6.96	
					Surge Method:	Surge block	
Post-Surg	e Sample				Depth (ft):	11	
Date and	Time:	04/26/1999	14:45		Conductivity:	0.542	
Comment		4.75			Temperature (°C):	14.2	
Comments.					Turbidity (NTU's):		
					pH:	6.41	
			PURG	E DATA			
Date and	Time:	04/26/1999	14:45		Volume of Water is	n Casing (g):	1.13
DTW(ft):		4.75			5 Casing Volumes	(g):	5.65
Height of	f Water Column ((ft):	6.92		Purge Method:		Submersible pum
Time	Temperature	Conductivity	Turbidity (NTUs)	pН	Gallons Purged	C	Comments
14:50		0.423	-10	6.3	15		
14:53	12.4	0.426	-10 10	6.3 6.29	25 45		
15:03	12.3	0.434 0.436	-10 -10	6.28	50		
15:00	12.2	0.430	-10	0.20	30		
	ter purge:	4.76		<u> </u>	Total gallons purg	ed:	55
Inspector		Ricardo Colón					
*DTW: de	pth to water (from to	p of riser)			**DTB: depth to botto	m (from top of ri	ser)

MONITORING WELL URS Greiner Woodward Clyde Federal Services **DEVELOPMENT LOG** WC6-11 WELL NUMBER: PROJ. NO./NAME: FOR98104/SAEP 40 - 50 ft Screened Interval: 03/24/1999 Date Installed: Casing Diameter: 2 inches 50 Depth of Well (ft): SURGE DATA Depth (ft): 40 Pre-Surge Sample 0.489 Conductivity: 11:15 04/20/1999 Date and Time: 12.3 Temperature: 3.97 DTW(ft):* -10 Turbidity (NTUs): DTB(ft):** 50.00 5.95 11:25 pH: 04/20/1999 Surge Date and Time: Surge block Surge Method: Depth (ft): 40 Post-Surge Sample 5.73 Conductivity: 04/20/1999 12:20 Date and Time: Temperature (°C): 13.0 Comments: 987 Turbidity (NTU's): 5.74 pH: **PURGE DATA** 7.48 Volume of Water in Casing (g): 04/20/1999 12:20 Date and Time: 37.42 5 Casing Volumes (g): 4.14 DTW(ft): Submersible pump Purge Method: 45.86 Height of Water Column (ft): Gallons Purged Comments pН Temperature Conductivity Turbidity (NTUs) Time 54 -10 5.71 13.5 8.36 12:30 5.74 75 8.54 -10 13.8 12:35 85 5.74 -10 13.9 8.73 12:39 110 5.74 14.0 8.60 -10 12:42 Total gallons purged: 110 DTW after purge: 4.08 ft Ricardo Colón Inspector: **DTB: depth to bottom (from top of riser)

*DTW: depth to water (from top of riser)

G-2

HARDING ESE MONITORING WELL DEVELOPMENT LOGS

FIELD DA	TA RECORD – WELL DEV	LOPMENT					Page of
Project:	SAEP	Job N	lumber:	52985	Date:	8-24-99]
Well I.D.:	PZ-99-01A	Activit	y Time:	Start: 13:15	End:	15:00	
Date of Well	Installation:						
Well Depth (TOR):	ft. Screen Length	: ff	Protec St	tive Casing ickup (from ground):	ft	Protec Casing/Ri Differen	ser ft.
Pre-Develor	oment						
Depth To Water (TOR):	ft. Depth to) ft		Post- evelopment th to Water (TOR):	ft	Depti Sedime	
Height of Wa Column:	ft. X 0.65	gal/ft (2 inch) = [gal/ft (4 inch) gal/ft (8 inch)	*	Gallons/Volume			Total Gallons Purged
Purge Data	TIMÉ:	14: 34	15:00			-	
	Purge Volume, Gallons	ي مه	ю	,			
	Temp, Degrees Celsius	24.3					
	pH, units	6.4			·		
	Specific Conductivity, ms	1.9					
	Turbidity, ntu	6					
	Sample Observations Clear Colored Cloudy Turbid Odor						
Equipment	Documentation			. · ·			
Type of Pum	p:		Sur	ge Technique:			
Size/Capacit	y of Pump:						
Pumping Ra	te: gal/min		Est	mated Recharge Rate	: [ft/min	
Notes:	STeasy Reading PERFORMED By M	of 67 to 5	80 PID	durry devel	ne me	+	-
			Signature:				

FIELD DA	ATA RECORD – WELL D	DEVLOPMENT				Page	/_ of		
Project:	SAEP		Job Number:	52985	Date: 8	14-99			
Well I.D.:	PZ-99-011	3 4	Activity Time: S	tart: 9:15	End: //:/	6			
Date of Well	Installation:								
Well Depth (TOR):	34.3 ft. Screen Le	ngth:	ft. Protecti	ive Casing ckup (from ground):	ft. C	Protective Casing/Riser Difference:	ft.		
Pre-Develor	oment								
Depth To Water (TOR):		oth to ment:	ft. Dept	Post- velopment h to Water (TOR):	ft.	Depth to Sediment:	ft.		
Height of Water Column: O.16 gal/ft (2 inch) = X 0.65 gal/ft (4 inch) 1.50 gal/ft (8 inch) Total Gallons Purged									
Purge Data	TIME:	9:28	10:07	10: 33	11:16	11:30			
	Purge Volume, Gallons			ľ					
	Temp, Degrees Celsius	22.6	12.3	12.3 23.3					
	pH, units	4.5	4.3	6.7 63.2					
	Specific Conductivity, ms	1.5	3.5	3.6	3.6				
	Turbidity, ntu	170	85	12	<u>}</u>				
	Sample Observations Clear Colored Cloudy Turbid Odor								
Equipment	Documentation								
Type of Pum	p:		Surg	ge Technique:		w			
Size/Capacit	y of Pump:								
Pumping Ra	te: gal/min		Estir	mated Recharge Ra	te:	ft/min			
Notes:	otes: PERFORMED BY M. Louisbury								
				Signature:					

FIELD DA	TA RECORD – WELL DEVLOPMI	ENT				Page _/_ of _(_			
Project:	SAEP	Job Number:	52985	Date:	8-24-99				
Well I.D.:	PZ-99-01C	Activity Time:	Start: /5:05	End:	18:3=				
Date of Well	Installation:								
Well Depth (TOR):	ft. Screen Length:	ft. Prot	Stickup (from ground):	ft.	Protect Casing/R Differer	iser ft.			
Pre-Develor	oment		Dead						
Depth To Water (TOR):	ft. Depth to Sediment:		Post- Development epth to Water (TOR):	ft.	Dept Sedim				
Height of Wa Column:	Height of Water Column: O.16 gal/ft (2 inch) = X 0.65 gal/ft (4 inch) Gallons/Volume Total Gallons Purged 1.50 gal/ft (8 inch)								
Purge Data	TIME: 15:05	15:10	18:30						
	Purge Volume, Gallons		~50 CM.						
	Temp, Degrees Celsius								
-	pH, units								
	Specific Conductivity, ms								
	Turbidity, ntu								
	Sample Observations Pio=0.	1 Pi0=3	5.5 PID=64						
	Clear								
<u>.</u>	Colored					· · · · · · · · · · · · · · · · · · ·			
	Cloudy								
	Turbid								
	Odor								
Equipment	Documentation								
Type of Pum	pp:	5	Surge Technique:						
Size/Capacit	ty of Pump:								
Pumping Ra	umping Rate: gal/min Estimated Recharge Rate: ft/min								
Notes:					,				
	PEXFORMED BY M. L	ows dury							
		<i>'</i>							
٠									
i			Signature:						

HARDING LAWSON	ASSOCIATE	<u>\$</u>	·					
							PAGE	OF
FIELD DATA RI	ECORD - WI	ELL DEVELO	PMENT					
PROJECT 5	TRATFORD,	4.E.P.	JOB NUMBER	472	54 DA	ATE 10-1	12-99	
WELL ID		1 A (Shallow)	ACTIVITY TIM	E START.	10:27	END //:	30	
DATE OF WELL INST.	2D-99-01A	9-26-99	1					
	TLD (110)		ı	PROTECT	IVE CASING	D	ROTECTIVE	
WELL		SCREEN		STICKUP			ASING / RISER	
DEPTH (TOR) //	59 FT	LENGTH	5 FT	GROUND)	F	T DI	FFERENCE	FT
PRE-DEVELOPMENT	•			POST-DEV	/ELOPMENT			
DEPTH TO		DEPTH TO		DEPTH TO			DEPTH TO	
WATER (TOR) 4	·22-FT	SEDIMENT //	59 FT	WATER (1	OR)	FT	SEDIMENT	FT
HEIGHT OF WATER					•			
column 5	.37 _{FT} x (0.16 GAL/FT (2 IN			GALLONS / V	OLUME		
		0.65 GAL/FT (4 IN	·/	75	TOTAL GALL	ONS PURGE	<u> </u>	
		1.5 GAL/FT (6 IN.)						
PURGE DATA								
PURG	E VOLUME, gallo	ns	~65	~68	- 71	~ 75	T	
	, degrees celcius		19.7	19.5	19.4	19.4	† . †	
pH, un	its	m\$	7.5	7.48	7,49	7.49		
	IFIC CONDUCTIV	/ITY, umhes/cm	24.5	24.7	24.6	24.7		
TURB	IDITY, ntu		153	57	35	15		
SAMP	LE OBSERVATIO	ons						
	CLEAR							
	COLORED	a Karlet	<u> </u>					
	TURBID	ny stepht neny steph	14 - dol	located of	imple +	For Ricor	-d	
	ODOR	0	0		J ,			
EQUIPMENT DOCUME	NTATION							
TYPE OF	NONATION			2112	>= * ===	_		
ļ	work-supp	Lied GRUNT)F05	SURG	SE TECHNIQU	= in	Punp	
SIZE / CARACITY OF F		2" SUBME	05(B) E	\exists				
SIZE / CAPACITY OF F	-UMP [e	<i>y</i> 50197001						
PUMPING RATE		GAL/MIN		ESTI RATE	MATED RECH.	······································	/MIN	
NOTES: Ven	a durky	well at	first k	out cle	ared ap	nicely -		
Had	ald Fr	well at rel odor.	to it, u	y Sheen	- on du	uly mut	t water	
	1		,					
,				SIGNATUR	E: 34	w W. o	yly	

HARDING	LAWSON ASSOCIATES						
						PAGE _	OF
FIELD D	ATA RECORD - WELL DEVELO	PMENT					
PROJECT	STRATFORD AEP	JOB NUMBE	R 472	54 D	ATE 10-12	-99	
WELL ID	MW-99-09B (Deep)	ACTIVITY T	IME START	08:50	END /0:	20	
10/2/01/27/99	MWCD-99-018 FELL INSTALLATION 9-36-99	7					
DATE OF W	ELL INSTALLATION						
· WELL	SCREEN			TIVE CASING		OTECTIVE	
DEPTH (TOP	(10.1	10 FT	STICKUP GROUND			SING / RISER	
<u> </u>			GROOND	/	DIF	FERENCE	FT
PRE-DEVEL	OPMENT		POST-DE	VELOPMENT			
DEPTH TO	DEPTH TO		DEPTH T	o		DEPTH TO	
WATER (TO	R) 7.07 FT SEDIMENT 50	.74 FT	WATER (TOR)	FT	SEDIMENT	FT
HEIGHT OF	WATER						
COLUMN	49.67 FT X 0.16 GALIFT (2 IN		7.9	GALLONS / \	/OLUME		
	0.65 GAL/FT (4 IN		138		ONS PURGED		
	1.5 GAL/FT (6 IN.		•	101/12/0/100	ONO I ONOLD		
			·				
PURGE DATA	Α					٠	
	PURGE VOLUME, gallons	160	180	200	2/23	~/38	
	TEMP, degrees celcius	13.6	13.5	13.4	13.8	13.9	
	pH, units	6.05	6.24	6.43	6.50	6.38	
	SPECIFIC CONDUCTIVITY, umhoc/cm	12.2	12-3	12.3	12.4	12.3	
	TURBIDITY, ntu	358	169	35	14	24	
	Salinity %	0.69	0.69	0.69	0.68	0.69	
	SAMPLE OBSERVATIONS						
	CLEAR						
	COLORED						
	CLOUDY Slightle	tushid.	- Pallete	16 10	<i>f</i>		
	ODOR ODOR	7407511	200001-4	somple	for rece	~d	
EQUIPMENT	DOCUMENTATION						
TYPE OF			SHR	GE TECHNIQU	ı= [
PUMP	DRILLER - SUPPLIED GRUNI) F05		OL ILOMINIQU	" W	Dung	
	25 6 4 1 1 2 2				L		
SIZE / CAPAC	CITY OF PUMP 2" SUBMERS	BIBLE				•	
		1	ESTI	MATE <u>D RECH.</u>	ARGE		
PUMPING RA	TE ~ 1.5 GAL/MIN		RATE	=	FT/N	1IN	
NOTES:							·
NOTES:							
				11	/ / ~	7	
			SIGNATUR	E. Sh	J. J.	Kura	
			SIGNATUR	· L- ·	·	1-1	

HARDING	LAWSON ASSOCIA	TES					·	
Note the second second							PAGE	1 OF 1
FIELD DA	ATA RECORD -	WELL DEVELO	PMENT					
PROJECT	STRATFORD) AEP	JOB NUMBE	472	54 0/	ATE 10-	11-99	
WELL ID 10-23-49	MW-99-	- 14 A Gradow	ACTIVITY TIM	ME START	13:33	END 14	1:20	
	MWCD - 99 - 0 ELL INSTALLATION	9-28-99]					
				PROTECT	TIVE CASING	PF	ROTECTIVE	
WELL		SCREEN		STICKUP	(FROM	C/	ASING / RISER	
DEPTH (TOR)	11.88 FT	LENGTH	5 FT	GROUND)	F	T DI	FFERENCE	FT
PRE-DEVELO	PMENT			POST-DE	VELOPMENT			
DEPTH TO		DEPTH TO		DEPTH TO			DEPTH TO	4
WATER (TOR	6.92 FT	SEDIMENT /	1.88 FT	WATER ([FT	SEDIMENT	FT
HEIGHT OF W			· · · · · · · · · · · · · · · · · · ·				OLDINILITY L	1 1
COLUMN	4.96 FT	X 0.16 GAL/FT (2 IN	.)=) 0.	79	GALLONS / V	OLUME		
		0.65 GAL/FT (4 IN		35	TOTAL GALL			
		1.5 GAL/FT (6 IN.)	h		- topic time to a second and a second as a second a			
			·				······································	
PURGE DATA	•							
	PURGE VOLUME, g	allons	~25	~30	~32	~35		
	TEMP, degrees celci	us	20.8°C	21.3	21.2	21.1		
	pH, units		8.02	8.07	8.08	8.08		
	SPECIFIC CONDUC	TIVITY, umbos/ cm	35.0	34.9	34.8	34.5		
	TURBIDITY, ntu		300	30	//	7		
	Sacinity	(%)	2.23	2,20	2.20	2.18		
	SAMPLE OBSERVA	TIONS						
	CLEAR							
	COLORED_							
•	CLOUDY							
	TURBID	SLIGHTLY TO	IRBID AT	END -Co.	llected 5	Ample for	R RECORD	
	ODOR							
EQUIPMENT D	DOCUMENTATION							
TYPE OF				nun.	~~~~	_		
PUMP	DRILLER-S	UPPLIED GRU	NDFOS	SURG	GE TECHNIQU	E W/	Pump ; s Lock	SARGE-
0.75 / 0.45 / 0.4	, ,					B	Lock	
SIZE / CAPACI	ITY OF PUMP	2" SUB MEX	251BLE					
PUMPING RAT	E N1.3 Lite	ers/mingalimin		ESTII RATE	MATED RECHA		MIN	
· · · · · · · · · · · · · · · · · · ·		,				A	· · · · · · · · · · · · · · · · · · ·	
NOTES: CL	EARED up	NICELY						•
No	EARED up	/						
	.				1,	/		
				SIGNATUR	E: 10	Um V.	Lyly	

HARDING	LAWSON ASSOCIATES			·····			
FIELD DA	ATA RECORD - WELL DEVELO	PMFNT				PAGE	/ OF /
PROJECT	STRATFORD AEP	JOB NUMBE	R 472	<i>E</i> V	10	-11-99	
	100 (1/2)				ATE 10	7177	
WELL ID	MW-99-14B (Deep) # MW CD-99-02B	ACTIVITY TI	ME START	14:51.	END /	16:00	
DATE OF WE	ELL INSTALLATION 9-28-99						
			PROTECT	TIVE CASING		PROTECTIVE	•
WELL	SCREEN		STICKUP	(FROM	·	CASING / RISER_	
DEPTH (TOR)	59.2 FT LENGTH	10 FT	GROUND)F	<u>T</u>	DIFFERENCE	FT
PRE-DEVELO	PMENT		POST-DE	VELOPMENT		***************************************	
DEPTH TO	DEPTH TO		DEPTH TO	o		DEPTH TO	
WATER (TOR	R) 5.0 FT SEDIMENT 5	9.2 FT	WATER (TOR)	FT	SEDIMENT	FT
HEIGHT OF V	The state of the s					•	
COLUMN	54.2 FT X 0.16 GAL/FT (2 IN		8.7	GALLONS / V	OLUME	·	
	0.65 GAL/FT (4 IN	1.)	760	TOTAL GALL	ONS PURG	ED	
	1.5 GAL/FT (6 IN.))					
PURGE DATA	4		**************************************				
	DURGE VOLUME THE	1250	~255	1.7(0			7
	PURGE VOLUME, gallons TEMP, degrees celcius	14	14	~260			
	pH, units	4.73	6.72	6.71			
	SPECIFIC CONDUCTIVITY, umhos/cm	9.6	8.1	8.1			
	TURBIDITY, ntu	29	23	26			
	SALINITY (%)	0.53	0.43	0.43			
	SAMPLE OBSERVATIONS						
	CLEAR						
	COLORED		***				
	TURBID Very Shigh	the trees	D at Pa	di- Calle	+1/	anyte for R	
	ODOR_	7 ,000		- Cone	0104 30	maphe for 12	ecorg
						,	
	DOCUMENTATION		•	•			
TYPE OF	Dans D. C. Court		SUR	GE TECHNIQU	E W/	Pump	:
PUMP	PRILLER-SUPPLIED GA	UND FOS				1 0	
SIZE / CAPACI	ITY OF PUMP 2" SUBMER	SIBLE				***************************************	
-	4.06	1	ESTI	MATED RECHA	ARGE		
PUMPING RAT	TE NO.5 GALIMIN	<u>, </u>	RATE		F	T/MIN	
NOTES:					**		
				11	r	A	
			SIGNATUR	. The	n D.	The The	
			SIGNATUR		· · · · · · · · · · · · · · · · · · ·	/	

HARDING L	AWSON ASSOCIATE	<u> </u>						
Name of Street Street Street	WEALAS SERVISES IN						PAGE _	OF
FIELD DA	TA RECORD - W	ELL DEVELO	PMENT					
PROJECT	STRATFORD	AEP	JOB NUMBER	4725	54 D	ATE 8-36	-99	
WELL ID	PZ-99-02	A	ACTIVITY TIM	E START		END		
DATE OF WEL	L INSTALLATION	8-18-99				on 8-26-	umped ~	JOGALS.
,				PROTECT	IVE CASING		OTECTIVE	
WELL DEPTH (TOR)	10.66 FT	SCREEN LENGTH	5 FT	STICKUP GROUND)	- 1		SING / RISER	
		LENOTH _		GROOND)		- I DIF	FERENCE _	FT
PRE-DEVELOP	PMENT			POST-DE\	/ELOPMENT			
DEPTH TO		DEPTH TO		DEPTH TO			DEPTH TO	*
WATER (TOR)	5.01 FT	SEDIMENT	FT	WATER (T	OR) 5.0	/ FT	SEDIMENT	10.66 FT
HEIGHT OF WA		0.04 gal/fr		<i>†</i>				
COLUMN	5.65 FT X	0.16 GAL/FT (2 IN		70,2	GALLONS / \	/OLUME		
		0.65 GAL/FT (4 IN	.) ~6	2	TOTAL GALL	ONS PURGED		
		1.5 GAL/FT (6 IN.)						/
PURGE DATA			8-19-99	8-26-9	9-26-99	8.26.99	8-76-99	
	PURGE VOLUME, gall	ons	250	~ 5¥	N 59	260	267	
	TEMP, degrees celcius	oe	₹3.20	23.2	23.3	23.7	23.1	
	pH, units		29	4.29	6.33	6.34	4.35	
	SPECIFIC CONDUCTI	VITY, umhos/cm	J.Y	2.4.	2.3	2.26	2.29	
	TURBIDITY, ntu		13	13	5	-10 D	-40	
	Redox	mV	America	with the second	, page 1	215	215	
	SAMPLE OBSERVATION	ONS					O NI	U-not
	CLEAR							functioning
		YELLOW- C	Chronium	STAINE	D	***************************************		0
	Crondy		77 12 12 14 14 14 14 14 14 14 14 14 14 14 14 14		· · · · · · · · · · · · · · · · · · ·			
			***************************************	·····				
	ODOR							
EQUIPMENT DO	OCUMENTATION							
TYPE OF				SURC	GE TECHNIQU	JE CHA	273.4	5.0
PUMP	PERISTALTI	c				W S	LE Pump	ck
SIZE / CAPACIT	TY OF PUMP					<u> </u>		
PUMPING RATE	± 0.7	GAL/MIN		ESTII RATE	MATED RECH	ARGE FT/N	AINI	
				MAIL	• •	F 17P		
NOTES:								
					a H	[6. a	1	
				SIGNATUR	E:		77)	

HARDING L	AWSON ASSOCIATE	5	· · · · · · · · · · · · · · · · · · ·					
			·				PAGE	OF
FIELD DA	TA RECORD - W	ELL DEVELO	PMENT					
PROJECT	STRATFOR	DAEP	JOB NUMBER	4125	54 D	ATE 8-19	-99	
WELL ID	PZ-99-0	2 B	ACTIVITY TIM	IE START	0830	END /40	0	
DATE OF WEL	LL INSTALLATION	8-18-99]					
			_	PROTECT	IVE CASING	PR	OTECTIVE	
WELL	\ 	SCREEN		STICKUP			SING / RISER	
DEPTH (TOR)	34.56FT	LENGTH	5 FT	GROUND)	Flush M	A DIF	FERENCE [FT
BBE DEVELO	DMENT			2007.25				
PRE-DEVELOR	PIVICINI	DEPTH TO			VELOPMENT		DEDTUTO	
WATER (TOR)	4.96 FT		1.21 FT	DEPTH TO WATER (1		OY FT	DEPTH TO SEDIMENT	34.56FT
	77.0	OLDINIERT	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	WAILK (I	OK)		SEDIMENT [J 7.30F1
HEIGHT OF W		0.04 gallft (14	ax)	217		1		
COLUMN	FT X	0.16 GAL/FT (2 IN		1.17	GALLONS / \			
		0.65 GAL/FT (4 IN		64.5	TOTAL GALL	ONS PURGED		
		1.5 GAL/FT (6 IN.)						
PURGE DATA								
	PURGE VOLUME, galle	200	12,5	211 0	37.5	500	- 11	
	TEMP, degrees celcius	UIIS	21.8	24,0	T	50,0	64.5	
	pH, units	······································	5,99	21.8 6.02	6.04	21.5 6.04	21.1	
	SPECIFIC CONDUCTIV	VITY ******	3.64	4,33	4.53	4.63	4.70	
	TURBIDITY, ntu	VIII., GIIII-00/0111	*20009	497	694	71000	>1000	
	Redox	W. 1	256	196	207	218	236	
	SAMPLE OBSERVATION	ONS			1	1 270		
	CLEAR	JNG					. "	
		Dark yellow						
	CLOUDY							
	TURBID							
	ODOR	W						
FOUIPMENT D	OCUMENTATION							
	O COMENTATION							
TYPE OF PUMP	peristaltie			SURG	GE TECHNIQU	Sorg	e pump ge block	tubing
OWI	T PICTURE					10g/501	ge black	
SIZE / CAPACI	TY OF PUMP							
	[ı	ESTI	MATE <u>D RECH</u>	ARGE		
PUMPING RAT	E ± 0.2	GAL/MIN		RATE	<u> </u>	FT/N	NIN	
NOTES:								
NOTEO.								
						000	r	
				SIGNATUR	E:	enel O. C	wegos	gapen
							9 //	i i

HARDING L	AWSON ASSOCIAT	ES.			Manusconducturização provincia do la constante de la constante de la constante de la constante de la constante			1
EIEI D DA	TA RECORD - W	/EII DEVELO	DMENT				PAGE	OF/_
FIELD DA	P		PIVIENI					
PROJECT	STRATFORD	AGP	JOB NUMBER	4725	54 D	ATE 8-3	6-99	
WELL ID	PZ-99-0	70	ACTIVITY TIME	START	11:40	END /	4:15	
DATE OF WEL	LL INSTALLATION	8-18-99						
				PROTECT	IVE CASING	Р	ROTECTIVE	
WELL	1101	SCREEN		STICKUP	`		ASING / RISER	
DEPTH (TOR)	49.6 FT	LENGTH	5 FT	GROUND)	FLUSH F	T D	IFFERENCE	FT
PRE-DEVELOR	PMENT			POST-DE	VELOPMENT			
DEPTH TO		DEPTH TO		DEPTH TO)		DEPTH TO	*
WATER (TOR)	FT	SEDIMENT	FT	WATER (1	ror)	FT	SEDIMENT	FT
HEIGHT OF W	'ATER							
COLUMN	FT X	0.16 GAL/FT (2 IN	.) =		GALLONS / \	OLUME		
		0.65 GAL/FT (4 IN	.)		TOTAL GALL	ONS PURGE	D	
l		1.5 GAL/FT (6 IN.)	•					
PURGE DATA	Punged W	rell from 11	:40 TO 16:16	@ ~ 0	.2 GAL. /	MININ	370 min. XO.	Z= SACKIS.
I ONGE DATA	· V	TIME	14:45	15:05	15:45	16:00	16:45	-
	PURGE VOLUME, gall	ons	236	~50	~60	~65	168	
	TEMP, degrees celcius	Water annya a managan	19.7	19.8	19.5	19.5	19.6	
	pH, units		6.37	6.35	6.32	6.33	6.37	
	SPECIFIC CONDUCTI	VITY, umhos/cm	9.6	9.7	9.9	9.9	9.9	
	TURBIDITY, ntu			2	2	0		
	mV		224	280	347	321	315	
	SAMPLE OBSERVATI	ONS						
	CLEAR	10011-						
		gellans	~ #*					
	CLOUDY			***				
	ODOR			*****				
EQUIPMENT DO	OCUMENTATION							
TYPE OF				SURC	GE TECHNIQU	E Sur	ce pun	o Tubials
PUMP	perista	UTI C		_		UN/5	use Block	
SIZE / CAPACIT	TY OF PUMP							
				ESTIN	MATED RECH	ARGE		
PUMPING RATE	£ 0.2	GAL/MIN		RATE			/MIN	
NOTES:								
					A	an and an		
					E: The	0.7	1	
				SIGNATUR	E: <u> </u>	<u> </u>	7/	***************************************

HARDING L	AWSON ASSOCIATES			ann ann an t-aireann an t-airean		PAC	<u>. </u>	With Control to the Control of the C
FIELD DA	TA RECORD - WELL DEVELO	PMFNT				PAC	€OF _	-
			11700	- 11				
PROJECT	STRATFORD AEP JOB NUMBER 47254 DATE 8-18-98							
WELL ID	PZ-99-03	ACTIVITY TIM	ME START (5920	END /50	5		
DATE OF WEL	LINSTALLATION 8-17-99							
				IVE CASING	PF	ROTECTIVE		
WELL (TOP)	SCREEN SCREEN 5	0 FT	STICKUP	1		ASING / RISE	R	
DEPTH (TOR)	8.83 FT LENGTH 3	, o FT	GROUND)	Flush MA	T DI	FFERENCE		FT
PRE-DEVELOR	PMENT		POST-DEV	VELOPMENT				
DEPTH TO	DEPTH TO	1	DEPTH TO		····	DEPTH TO		
WATER (TOR)	4.82 FT SEDIMENT -	FT	WATER (T	ror) 4,9	FT	SEDIMENT	***************************************	FT
HEIGHT OF W	0,01177711111	n)						
COLUMN	4.01 FT X 0.16 GAL/FT (2 IN		16	GALLONS / \	/OLUME			
	0.65 GAL/FT (4 IN		1.5	TOTAL GALL	ONS PURGE)		
	1.5 GAL/FT (6 IN.))						
PURGE DATA								
	PURGE VOLUME, gallons	50	54	58	62	66 7	70 74	77,5
owe//.com	TEMP, degrees celcius	27.6	26.9	27.2	27.2		26.9 27.0	27.1
	pH, units	6.07	610	6.08	6.07		6.06 6.05	
	SPECIFIC CONDUCTIVITY, umnes/cm	1,34	1.10	1.64	1.06		.04 1.04	1.05
AND DESCRIPTION OF THE PROPERTY OF THE PROPERT	TURBIDITY, ntu	335	81.3	50.1	66.0		5.5 20.9	1.1
	ORP	* jungili	-194	- 295	-303	-297 7	<i>1</i> 98 -282	287
	SAMPLE OBSERVATIONS							
	CLEAR							
	COLORED							
	CLOUDY							
	TURBID							
naista ann an t-	ODOR							
EQUIPMENT D	OCUMENTATION							V
TYPE OF			SUR	GE TECHNIQU	JE (ن لك	
PUMP	Peristaltic				entre	sereen /	eng Hi	,
SIZE / CAPACITY OF PUMP								
ESTIMATED RECHARGE								
PUMPING RATE FT/MIN RATE								
NOTES: 56 gallons removed to allow for water used during installation								
			0101147117	E: Dan	,001	AT CHAS		
			SIGNATUR	E: Y (V)	yx C.C	vegog		

FIELD DATA RECORD - WELL DEVELOPMENT						
Project: Remedial Investigation	Well Installation Date:	1-20-01		Project No. 52985		
Client: SAEP	Well Development Date:	1/3/01	Logged by:	Checked by:		
Well/Site I.D.: HESE -01-05 D	Weather: NA- Procl	edini	Start Date:	Finish Date:		
Well Construction Record Data: Bottom of Screen	Well Diameter	Z in.	Start Time:	Finish Time:		
Godinion Campining	rom Ground Surfac	Top of Riser □				
Screen Length Continue Conti	Fluids Lost during Drilling	gal.				
Protective Casing Stick-up FLOSH ft. Protecti	ve Casing/Well Diff. 0.7	ft. PID Read	dings: Ambient A Well Mouti	O ppm		
Well Levels: Sedia	ment:					
it.	ell Depth before Development	167.34 ft.	(from top of PVC)		
11.	Il Depth after Development	166.03 ft.	•			
11.	diment Depth Removed	+ 0.70 ft.				
HT of Water Column 16 4. 2, ft. x a	0.16 GAL/FT (2 IN.) 0.65 GAL/PI (4 IN.) = 1.5 GAL/FT (6 IN.)	26.7	gal./vol.			
☐ Surge Block	oximate Recharge Rage Gallons Removed	Z gpm gal.				
Well Development Criteria Met:				ial Xai		
1	1 Clean out _ w	Vell water clear to	a unaided eve	Yes No □ &		
Notes: Turbididy very High-will with while funp of a Lai	te Date s	ediment thicknessell is <1.0% of so	ss remaining in			
12/5/01 Pumped #30 gal with whe)	urbidity < 5NTUs 10% change in fi	3	□ /8ď		
Final MTU 100. (See 11/12/41	es book for Ditails)	. 0 /0 0/1ago iii ii	ora paramotors	4 –		
End of Well Development Sample (1 pint) Collected?	Yes No					
Water Parameter Measurements						
Record at start, twice during and at the end of developm		Conductance		to a marke		
Time Volume Total Gallons ph	(Units) Temp. (°C)	(ms/cm) T	71000	mping Rate		
1412 50 50	1.64 (7.2)	29.1	<u>879</u> _			
1435 30 85 \$	16.8	29.9	71400 _			
100 2. 16000 (.86 16.8 .8b 16.7	29, 17 29 F	7100 695			
	81 119	0° 1°) 09.6	850	4		
	16.9	29.5	900	<i>N</i>		
Well Developer's Signature			Ua	rdina ESE		

FIELD DATA RECORD - WELL DEVELOPMENT						
Project: Remedial Investigation	Well Installation Date:	11-17-01		Project No. 52985		
Client: SAEP	Well Development Date:	215/01	Logged by: MUL	Checked by:		
Well/Site I.D.: HESE-01-06I	Weather: Sunny	600	Start Date:	Finish Date:		
Well Construction Record Data:	Well Diamete		Start Time:	Finish Time:		
Bottom of Screen ft. 7	Trans Craying Surface D. Fra	111.	/30	1,50		
Sediment Sump/Plug ft.	From Ground Surface 🗅 Fro	m Top of Hiser u				
Screen Length ft.	Fluids Lost during Drilling	gal.				
Protective Casing Stick-up Tush ft. Protect	tive Casing/Well Diff. ~0.5	3 ft. PID Rea	dings: Ambient A	O ppm		
_	iment:					
Initial 5.33 ft. W	ell Depth before Development	11.	(from top of PVC	(2)		
End of Development 5.32 ft. W	ell Depth after Development	29.43 ft.				
24 Hours after Development 5.32 ft. Se	ediment Depth Removed	0.30 ft.				
HT of Water Column 24 ft. x 0.16 GAL/FT (2 IN.)						
Equipment: Dedicated Submersible Pump Approximate Recharge Rage gpm Surge Block Total Gallons Removed SS gal. Grundfos Pump 2"						
		±10% change in f	ield parameters	ф <u> </u>		
End of Well Development Sample (1 pint) Collected?	Yes No Ø □					
Water Parameter Measurements	1					
810 820 332 3 3 4 4 40 6	H (Units) Temp. (°C) 5.75 21.4 6.00 22.3 6.18 22.1 6.29 22.0	1.81 6 .665 .911 2,08 1.53	Turbidity (ntu) P 100 respe 546 279 126 138	umping Rate		
Well Developer's Signature Mary	<i>}</i>		———Н	arding ESE—		

Project Remedial Investigation Well Installation Date:	FIELD DATA RECORD - WELL DEVELOPMENT						
Well Construction Record Data: Bottom of Screen Sediment SumpyPlug Screen Length From Ground Surface From Top of Riser D Start Time: Star	Project: Remedial Investigation	Well Installation Date:	11-30-01				
Well Construction Record Data: Bottom of Screen Sediment Sump/Plug Screen Length From Ground Surface © From Top of Riser © From Ground Surface © From Top of Riser © From Ground Surface © From Top of Riser © Fluids Lost during Drilling gel. Protective Casing Stick-up Fluids Lost during Drilling gel. Ambient Air O ppm Well Mouth 4/O ppm Well Mouth 4/O ppm Well Mouth 4/O ppm Well Mouth 4/O ppm I S.I. 88 t. I S.I. 88 t. I S.I. 88 t. I S.I. 88 t. I Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time: Start Time	Client: SAEP	Well Development Date:	15/01		Checked by:		
Sediment Sump/Plug Screen Length Protective Casing Stick-up Protective Casing Stick-	Well/Site I.D.: HESE-01-6D	Weather: Sunny, 6	00				
Sediment Sump/Plug Screen Length The protective Casing Stick-up Protective Casing Stick-up Protective Casing Stick-up Protective Casing Stick-up Protective Casing Meil Diff. From Ground Surface From Top of Riser From		Well Diameter					
Screen Length ft. Fluids Lost during Drilling gal. Protective Casing Stick-up Fluit ft. Protective Casing/Well Diff. Fluids Lost during Drilling gal. Protective Casing Stick-up Fluit ft. Protective Casing/Well Diff. Fluids Lost during Drilling gal. Protective Casing Stick-up Fluit ft. Protective Casing/Well Diff. Fluids Lost during Drilling gal. Protective Casing Stick-up Fluit ft. Fluids Lost during Drilling gal. Protective Casing Stick-up Fluit ft. Fluids Lost during Drilling gal. Protective Casing/Well Diff. Fluit ft. Well Development Well Development Scdiment Well Depth after Development Scdiment Well Depth after Development Scdiment Depth Removed Gal. Fluit ft. Well Development Scdiment Depth Removed Gal. Fluit ft. Well Gallons Removed Gallons Removed Gallons Removed Gallons Removed Well water clear to unaided eye Sediment thickness remaining in the close of the Companion of t	4 -	and Overland Overland D. Fran			1,50		
Fluids Lost during Drilling gal.	Sediment Sumpring	om Ground Surface Li From	n Top of Hiser u				
Well Levels: Initial End of Development 24 Hours after Development 5,5 b ft. Well Depth before Development 24 Hours after Development 5,5 b ft. Well Depth after Development 3,5 b ft. Well Depth after Development 15,6 b ft. Well Development 15,6 b ft. Well Water Column 15,6 b ft. Well Water Column 15,6 b ft. Well Water Column 16,6 b ft. Well Water Column 16,7 b ft	Screen Length	Fluids Lost during Drilling	gal.				
Initial Ini	Protective Casing Stick-up	ve Casing/Well Diff0,4	O ft. PID Rea	dirigs:	h 1/ ca		
End of Development S, S S S S S S S S S	Well Levels: Sedir	nent:					
24 Hours after Development 5.45 ft. Sediment Depth Removed HT of Water Column Y6 ft. 10.16 GAL/FT (2 IN.) 23.4 gal./vol. Equipment:	Initial $5,64$ ft. We	II Depth before Development	151.08 _{ft.}	(from top of PVC	()		
HT of Water Column Y6 ft. x 0.66 GAL/FT (2 IN.) = 33,4 gal./vol.	End of Development $5.56_{ m ft.}$ We	Il Depth after Development	15/94				
Equipment: Approximate Recharge Rage Surge Block Total Gallons Removed DEC gal.	24 Hours after Development 5.45 ft. Sec	diment Depth Removed	0.86 ft.				
Dedicated Submersible Pump Approximate Recharge Rage Surge Block Bailer 2" Total Gallons Removed DEO gal.	HT of Water Column $\left(\begin{array}{c c} 4 & \text{ft.} \\ \end{array} \right) \times 0.65 \text{ GAL/PI (4 IN.)} = \left(\begin{array}{c c} 3 & 4 \\ \end{array} \right) \text{ gal./vol.}$						
Surge Block Bailer 2" 4" 4" Well Development Criteria Met: Notes: Such recharge PD - O Hecds pare Sediment thickness remaining in well is <1.0% of screen length Turbidity < 5NTUs 10% change in field parameters 10% change in field para							
Bailer 2"		oximate Recharge Rage	5 gpm				
Well Development Criteria Met: Notes: Food recharge PID-O Hodgod Purjed with worker fung to Clen out Sediment thickness remaining in well is <1.0% of screen length Turbidity < 5NTUs End of Well Development Sample (1 pint) Collected? Water Parameter Measurements Record at start, twice during and at the end of development (minimum): Time Volume Total Gallons pH (Units) Temp. (°C) Solution of Conductance (ms/cm) Turbidity (ntu) Pumping Rate 352 50 50 6.60 180 29.6 29.7 108 2	☐ Bailer ☐ 2" ☐ Total	Gallons Removed	ABO gal.				
Notes: Good rectarse PID-O Hadspare Sediment thickness remaining in well is <1.0% of screen length Order to Whate Pany to Clea and to wall of shape in field parameters End of Well Development Sample (1 pint) Collected? Yes No Water Parameter Measurements Record at start, twice during and at the end of development (minimum): Time Volume Total Gallons pH (Units) Temp. (°C) (ms/cm) Turbidity (ntu) Pumping Rate Start So So Good 180 29.6 29.6 29.7 20.7 20.7 20.7 20.7 20.7 20.7 20.7 20							
Turbidity < 5NTUs Turbidity < 5NTUs ±10% change in field parameters	1 / 1	Hadrone _	\A(-				
Turbidity < 5NTUs Turbidity < 5NTUs ±10% change in field parameters	Proposit with walker pung T	lon Switches	Sediment thickne	ss remaining in			
End of Well Development Sample (1 pint) Collected? Water Parameter Measurements Record at start, twice during and at the end of development (minimum): Time Volume Total Gallons pH (Units) Temp. (°C) (ms/cm) Turbidity (ntu) Pumping Rate 352 50 50 6.60 180 29.6 29.7 29.7 29.7 20.7 20.7 20.7 20.7 20.7 20.7 20.7 20		(les ant	Turbidity < 5NTU	S	o pr		
End of Well Development Sample (1 pint) Collected? Water Parameter Measurements Record at start, twice during and at the end of development (minimum): Time Volume Total Gallons pH (Units) Temp. (°C) (ms/cm) Turbidity (ntu) Pumping Rate 381 SO SO 6.60 180 29.6 29.6 29.7 29.7 29.7 29.7 29.7 29.7 29.7 29.7	1 11 0 1 11	w .	±10% change in f	ield parameters	ф <u>а</u>		
Record at start, twice during and at the end of development (minimum): Time Volume Total Gallons pH (Units) Temp. (°C) (ms/cm) Turbidity (ntu) Pumping Rate 382 SO SO 6.60 180 29.6 29.7 29.7 29.7 29.7 29.7 29.7 29.7 29.7		Yes No					
Time Volume Total Gallons pH (Units) Temp. (°C) (ms/cm) Turbidity (ntu) Pumping Rate 3 52 50 50 6.60 180 24.6 24.8 24.7 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24	Water Parameter Measurements						
341 5 5 6,25 188 38.8 overrange 3 6 Pm		,					
852 50 50 6.60 180 29.6 29.7 267 903 65 67 6.66 17.9 29.7 108 2							
903 65 67 6.66 17.9 29.7 108 2					2 4 Pm		
916 105 105 6.68 18.0 29.1 105 2		/	29.7		2		
			29,1	105	2		
926 140 140 6,81 17.7 30.0 96.0 2		,81 (7,7	30.0	96.0	2		
Weil Developer's Signature Man Lon							
9912003(d) Harding ESE—				Н	arding ESE—		

FIELD DATA RECORD - WELL DEVELOPMENT						
Project: Remedial Investigation	Well Installation Date:	8-01		Project No. 52985		
Client: SAEP	Mell Development Date: eta eta	101	Logged by: かんし	Checked by:		
Well/Site I.D.: HEJE-01-07I	Weather: Sunny, 600		Start Date:	Finish Date:		
Well Construction Record Data: Bottom of Screen	Well Diameter	ک in.	Start Time:	Finish Time:		
Deditrient dumpir lug	om Ground Surface 🗆 From To	p of Riser 🗅				
Screen Length ft.	Fluids Lost during Drilling	gal.				
Protective Casing Stick-up Fluj# ft. Protecti	ve Casing/Well Diff. ~ C. \$ / f	PID Rea	dings: Ambient A Well Mout	ppm		
Well Levels: Sedir	nent:					
11.		9403 ft.	(from top of PVC	()		
11.		9433 ft.	•			
	, L.	1,30 ft.				
HT of Water Column 24 ft. x a	HT of Water Column 0.16 GAL/FT (2 IN.)					
Equipment: Marcon Dedicated Submersible Pump Approximate Recharge Rage I gpm						
Well Development Criteria Met:				Waa Na		
Notes: Very twb1d- Good rcatane PD0-524-600 ppm ~ Very Low PH- Well water clear to unaided eye Sediment thickness remaining in well is <1.0% of screen length Turbidity < 5NTUs ±10% change in field parameters						
	Yes No					
End of Well Development Sample (1 pint) Collected?	<u> </u>					
Water Parameter Measurements Record at start, twice during and at the end of development (minimum): Conductance						
Time Volume Total Gallons pH			Turbidity (ntu) Pi ひとへひらと	umping Rate		
1323 2 10 5		150	surrage_	1		
	.o. L 30, 3 Y		ourvoise _	1		
$\frac{1348}{1412} - \frac{4}{5} = \frac{30}{50} - \frac{4}{40}$		$\frac{13}{2}$	183	<u> </u>		
11/20 15 15		<u> </u>	370	<u> </u>		
1476 2 80 4	78 Jul 2	12	153			
Weil Developer's Signature	48 22.6 3. lung	02	4,4 L			
			Ha	rding ESE		

FIELD DATA RECORD - WELL DEVELOPMENT						
Project: Remedial Investigation	Well Installation Date:		Project No. 52985			
Client: SAEP	Well Development Date:	Logged by:	Checked by:			
Well/Site I.D.: HESE-01-07D	Weather: () \(\sum \) \(\sum \) (\(\oldown \) (\oldown \) (\(\oldown \) (\(\oldown \) (\(\oldown \) (\oldown \) (\(\oldown \) (\(\oldown \) (\oldown \) (\(\oldown \) (\oldown \) (\(\oldown \) (\(\oldown \) (\oldown \) (\(\oldown \) (\(\oldown \) (\oldown \) (\(\oldown \) (\(\oldown \) (\oldown \) (\(\oldown \) (\(\oldown \) (\oldown \) (\(\oldown \) (\(\oldown \) (\oldown \) (\(\oldown \) (\(\oldown \) (\oldown \) (\(\oldown \) (\(\oldown \) (\oldown \) (\oldown \) (\(\oldown \) (\oldown \) (\(\oldown \) (\oldown \) (\(\oldown \) (\oldown \) (\oldown \) (\(\oldown \) (Start Date:	Finish Date:			
Well Construction Record Data:	Well Diameter 7 .	Start Time:	Finish Time:			
Bottom of Screen	ol in.	1700	1113			
Sediment Sump/Plug ft.	om Ground Surface From Top of Riser					
Screen Length ft.	Fluids Lost during Drilling gal.					
Protective Casing Stick-up TUSH ft. Protecti	ve Casing/Well Diff. 70.42 ft. PID Rea	- 1	hir C ppm			
Well Levels: Sedir	nent:					
Initial $ 4.84 $ Me	II Depth before Development 128.35 ft.	(from top of PVC	>)			
End of Development 5.36 ft. We	II Depth after Development $\lambda .5$ ft.					
24 Hours after Development 5.27 ft. Sec	diment Depth Removed 0.22 ft.					
	0.16 GAL/FT (2 IN.)	· 				
HT of Water Column 12 4 ft. x	HT of Water Column 12 4 ft. x 0.65 GAL/PI (4 IN.) = 20 gal./vol.					
Equipment: Dedicated Submersible Pump Surge Block Bailer 2" Total Gallons Removed Grundfos Pump 2" 4"						
Well Development Criteria Met: Notes: Slower rectorie from other beep wolls The first Healspace - 1.2 - 4.2 ppm Well water clear to unaided eye Sediment thickness remaining in well is <1.0% of screen length Turbidity < 5NTUs ±10% change in field parameters						
End of Well Development Sample (1 pint) Collected?	Yes No					
Water Parameter Measurements						
Record at start, twice during and at the end of developm	Conductance					
Time Volume Total Gallons ph		Furbidity (ntu) P 304/バット	umping Rate			
	call last act	vervense				
	6.51 19.2 26.2	340				
1354 4 45 6	134 19,4 26.5	250	1			
	172 19,0 27,8	396	1			
	19,1 37,8	181				
1443 7 110 6	19.0 27.2	190				
Well Developer's Signature	y		arding ESE-			

FIELD DATA RECORD - WELL DEVELOPMENT						
Project: Remedial Investigation	Well Installation Date: 13-05-01		Project No. 52985			
Client: SAEP	Well Development Date: 12(7/01	Logged by:	Checked by:			
Well/Site I.D.: HESE-01-8D	Weather: Clouck 500	Start Date:	Finish Date:			
Well Construction Record Data:	Well Diameter	Start Time:	Finish Time:			
Bottom of Screen	a in.	101	930			
Sediment Sump/Plug ft.	rom Ground Surface From Top of Riser					
Screen Length ft.	Fluids Lost during Drilling gal.					
Protective Casing Stick-up F(4) ft. Protection	ive Casing/Well Diff ft. PID Rea	Ambient A Well Mout	O ppm			
Well Levels: Sedie	ment:					
Initial 6.43 ft. We	ell Depth before Development 122.45 ft.	(from top of PVC	>)			
End of Development 5.28 ft. We	ell Depth after Development $122,51$ ft.					
11.	diment Depth Removed 0.06 ft.					
HT of Water Column 1.5 GAL/FT (2 IN.)						
Equipment: Deficated Submersible Pump Approximate Recharge Rage gpm Surge Block Total Gallons Removed ISO gal.						
Well Development Criteria Met:						
Notes: Good Fisharje - PDD - O - 17.5 pm Furjed with Wocker pump then Suitched To whale Pump to View out the Bottom of the (NOU) End of Well Development Sample (1 pint) Collected? Page No Well water clear to unaided eye Sediment thickness remaining in well is <1.0% of screen length Turbidity < 5NTUs ±10% change in field parameters						
Water Parameter Measurements						
Record at start, twice during and at the end of developm	nent (minimum):					
Time Volume Total Gallons pt 10 727	H (Units) Temp. (°C) (ms/cm) 131 131 248	Turbidity (ntu) P 151 UURINENSE 772 610 SYY 16, Y	umping Rate			
Well Developer's Signature Well Developer's Signature	J		arding ESE—			

FIELD DATA RECORD - WELL DEVELOPMENT						
Project: Remedial Investigation	Well Installation Date:	11-29-01		Project No. 52985		
Client: SAEP	Well Development Date:	12/5/01	Logged by: かみし	Checked by:		
Well/Site I.D.: HESE-01-09D	Weather: Sunny	600	Start Date:	Finish Date:		
Well Construction Record Data:	Well Diame	eter 7	Start Time:	Finish Time:		
Bottom of Screen		α in.	1235	16 47		
Sediment Sump/Plug ft.	om Ground Surface 🗆 🛚 I	From Top of Riser 🔾				
Screen Length ft.	Fluids Lost during Drilling	g gal.				
Protective Casing Stick-up Flus/+ ft. Protecti	ve Casing/Well Diff.	ft. PID Rea	dings: Ambient A	ppm		
Well Levels: Sedin	nent:					
	ell Depth before Developm	7, 7, 7, 1,	(from top of PVC	D)		
1.	ell Depth after Developmer	1 8 11.	•			
. Jes . II.	diment Depth Removed	4,45 ft.				
HT of Water Column 107 ft. x 🗆	0.16 GAL/FT (2 IN.) 0.65 GAL/PI (4 IN.) = 1.5 GAL/FT (6 IN.)	~17	gal./vol.			
☐ Surge Block	oximate Recharge Rage Gallons Removed	300 gal.				
Well Development Criteria Met: Notes: Good refore - Very turbed a lot of Sedinat at Botton of Woll. PTD - 1.6-3.9 Well water clear to unaided eye Sediment thickness remaining in well is <1.0% of screen length Turbidity < 5NTUs ±10% change in field parameters						
End of Well Development Sample (1 pint) Collected?	Yes No					
Water Parameter Measurements	,					
Record at start, twice during and at the end of developm		Conductance				
Time Volume Total Gallons ph	1 (Units) Temp. (^O C) 5.93 19.6	(ms/cm)	Turbidity (ntu) F	Pumping Rate 2 - GPM		
	6.14 18.9		Guerrenje	2		
	6,19 18.7	$-\frac{33.7}{23.7}$	\$59	2		
	18.6	23.9	470	2		
100 -	0.21 18.4	24,0	590	1		
Well Developer's Signature 9912003(d)			Н	arding ESE—		

FIELD DATA RECORD - WELL DEVELOPMENT					
Project: Remedial Investigation	Well Installation Date: $1_{ m a}$	11861	·	Project No. 52985	
Client: SAEP	Well Development Date:	120/01	Logged by:	Checked by:	
Well/Site I.D.: HEIE-01-100	Weather: MA - Pas	ide	Start Date:	Finish Date:	
Well Construction Record Data:	Well Diameter		Start Time:	Finish Time:	
Bottom of Screen			73 0	1175	
Sediment Sump/Plug ft.	om Ground Surface 🗅 Fror	n Top of Riser U			
Screen Length 10 ft.	Fluids Lost during Drilling	gal.			
Protective Casing Stick-up Flush ft. Protecti	ve Casing/Well Diff. W4	ft. PID Rea	dings: Ambient A	O ppm	
Well Levels: Sedin	ment:				
Initial 5.76 ft. We	II Depth before Development	109,16 ft.	(from top of PVC	(f)	
End of Development 578 ft. We	Il Depth after Development	ft.	Andles Cut Fritted V	buelog N	
24 Hours after Development ft. Se	diment Depth Removed	ft.		,	
HT of Water Column C5 ft. X	0.16 GAL/FT (2 IN.) 0.65 GAL/PI (4 IN.) = 1.5 GAL/FT (6 IN.)	~ 17	gal./vol.		
Surge Block Bailer 2" Grundfos Pump 2" 4" Grundfos Pump 2" 4" Grundfos Pump 2" Grundfos Pump 2"	oximate Recharge Rage Gallons Removed	2 gpm 180 gal.			
Well Development Criteria Met: Notes: D- Daullers Cut PUL to F.T	Daso Duy			Yes Ņo	
1		Well water clear Sediment thickne) S K (1)	
W.L. are not consistent		well is <1.0% of s Turbidity < 5NTU		o år	
		±10% change in		P O	
End of Well Development Sample (1 pint) Collected?	Yes No				
Water Parameter Measurements					
Record at start, twice during and at the end of development		Conductance		·	
Time Volume Total Gallons pt	I (Units) Temp. (^O C) ጊ 3 ኔ ኒ& &	(ms/cm) 0:47	Furbidity (ntu) F	Pumping Rate	
	18.6	12.3	ove~	1	
859 3 50 5	.95 18.3	26.1	over	1	
930 4 80 5	:42 18.4	26.1	219	2_	
	.41 18.3	25.9	106		
Purgod with whole	pump to Clear	- openaining	Sit of	Battom	
Well Developer's Signature		nago que que que de Maria de Caractería de C	Н	arding ESE—	

FIELD DATA RECORD - WELL DEVELOPMENT						
Project: Remedial Investigation	Well Installation Date:			Project No. 52985		
Client: SAEP	Well Development Date: 12/5/6	. 1	Logged by: Vnlf C	Checked by:		
Well/Site I.D.: HESE-01-12I	Weather: Sunny, 60°		Start Date:	Finish Date:		
Well Construction Record Data: Bottom of Screen	Well Diameter	? in.	Start Time:	Finish Time:		
4 –	rom Ground Surface From Top o	f Riser 🗅				
Screen Length ft.	Fluids Lost during Drilling	gal.				
Protective Casing Stick-up Full ft. Protection	ve Casing/Well Diff. 70,32 ft.	PID Rea	dings: Ambient /	O ppm		
	ment:					
Initial 5.64 ft. We		3.73 _{ft.}	(from top of PV	C)		
3,35 [[.		125 ft.	•			
37.11.	<u> </u>	62 ft.				
HT of Water Column 39 ft. x	0.16 GAL/FT (2 IN.) 0.65 GAL/PI (4 IN.) = 6 1.1.5 GAL/FT (6 IN.)	.2	gal./vol.			
Surge Block	oximate Recharge Rage Gallons Removed	J gpm G gal.				
Well Development Criteria Met: Notes: Got of CHarge PDD-D 284~ 325ppm Well water clear to unaided eye Sediment thickness remaining in well is <1.0% of screen length Turbidity < 5NTUs ±10% change in field parameters						
End of Well Development Sample (1 pint) Collected?	Yes No □ \$7					
1020 3 1031 2 15 1043 3 25 5 1051 4 40 5 1106 5 55 5	H (Units) Temp. (°C) (ms. 5.95 21.4 6.	(cm) (90) (1) (4) (12)	Furbidity (ntu) Overrorse 367 116 6,37 14,2	Pumping Rate		
Well Developer's Signature	~~~			larding ESE-		

FIELD DATA RECORD - WELL DEVELOPMENT						
Project: Remedial Investigation	Well Installation Date:		Project No. 52985			
Client: SAEP	Well Development Date: 12/5/01	Logged by:	Checked by:			
Well/Site I.D.: HESE-01-12D	Weather: Sunny, 600	Start Date:	Finish Date:			
Well Construction Record Data:	Well Diameter 2	Start Time:	Finish Time:			
Bottom of Screen		n. 10/0	1117			
Sediment Sump/Plug ft.	From Ground Surface From Top of Riser					
Screen Length ft.	Fluids Lost during Drilling	al.				
Protective Casing Stick-up Flush ft. Pro	etective Casing/Well Diff0.38 ft. PID F	Readings: Ambient A	ppm			
	Sediment:					
Initial 43 _{ft.}	Well Depth before Development 155,52	ft. (from top of PVC	C)			
End of Development 5.31 ft.	Well Depth after Development 155,97					
24 Hours after Development 5.20 ft.	Sediment Depth Removed	ft.				
HT of Water Column 152 ft. x	0.16 GAL/FT (2 IN.) 0.65 GAL/PI (4 IN.) = 24.3 1.5 GAL/FT (6 IN.)	gal./vol.				
Equipment: Dedicated Submersible Pump Approximate Recharge Rage Surge Block Bailer 2" Total Gallons Removed Grundfos Pump 2" 4"						
Well Development Criteria Met: Notes: Good rechase - PPO - No - Y4.0 ppm ■ Well water clear to unaided eye ■ Sediment thickness remaining in well is <1.0% of screen length ■ Turbidity < 5NTUs ■ ±10% change in field parameters						
End of Well Development Sample (1 pint) Collected?						
Water Parameter Measurements Record at start, twice during and at the end of deve Time Volume Total Gallons 1037 2 50 1051 3 85 1101 4 110 1110 5 140	Conductance	Turbidity (ntu) FOUCTONSE 141 124 379 18.0	Pumping Rate 2 2 2 2			
Well Developer's Signature MuxH.	fry		arding ESE—			

FIELD DATA RECORD - WELL DEVELOPMENT									
Project: Remedial Investigation	Well Installation Date:		Project No. 52985						
Client: SAEP	Well Development Date: 2/6/01	Logged by: Mみし	Checked by:						
Well/Site I.D.: HEJE-01-14I	Weather: Sunny, 600	Start Date:	Finish Date:						
Well Construction Record Data: Bottom of Screen	Well Diameter 2 in.	Start Time:	Finish Time:						
Sediment Sump/Plug ft. Fr	rom Ground Surface From Top of Riser								
Screen Length ft.	Fluids Lost during Drilling gal.								
Protective Casing Stick-up Flus Hft. Protecti	ve Casing/Well Diff. 70,32 ft. PID Rea	dings: Ambient A	ppm						
Well Levels: Sedin	ment:								
11.	ell Depth before Development 4457 ft.	(from top of PVC)						
1.	ell Depth after Development 46.94 ft.	•							
J. 11.	diment Depth Removed 2,37 ft.								
HT of Water Column									
☐ Surge Block	oximate Recharge Rage Gallons Removed Gallons Removed Gallons Removed								
Well Development Criteria Met: Notes: Good vectorie - PID - 147	■ Well water clear in Sediment thickney well is <1.0% of s ■ Turbidity < 5NTU ■ ±10% change in f	ess remaining in screen length s	Yes No O O O						
End of Well Development Sample (1 pint) Collected?									
859 2 10	H (Units) Temp. (°C) (ms/cm) H-98 H-98 H-98 H-98 H-98 H-98 H-98 H-98	Turbidity (ntu) DUE VONSE 146 260 23.5 1,6 111	rumping Rate						
Well Developer's Signature		H	arding ESE—						

FIELD DATA RECORD - WELL DEVELOPMENT									
Project: Remedial Investigation	Well Installation Date:	119/01		Project No. 52985					
Client: SAEP	Well Development Date:	12/20/01	Logged by:	Checked by:					
Well/Site I.D.: HESE-01-15I	Weather: WA - In	side	Start Date:	Finish Date: () しんしん					
Well Construction Record Data:	Well Diameter		Start Time:	Finish Time:					
Bottom of Screen 35.2 ft.		∠ in.	0 10	950					
Sediment Sump/Plug ft.	om Ground Surface Fro	m Top of Riser 🗅		• •					
Screen Length 10 ft.	Fluids Lost during Drilling	30 gal.							
Protective Casing Stick-up Flus # ft. Protective	ve Casing/Well Diff.	ft. PID Rea	dings: Ambient A Well Mout	() ppml					
Well Levels: Sedin	nent:								
16.	II Depth before Development	11.	(from top of PVC	;)					
End of Development S.S.Y ft. We	Il Depth after Development	35,24 ft.	,						
24 Hours after Development ft. Sec	liment Depth Removed	0.10 ft.							
HT of Water Column 30 ft. x a	0.16 GAL/FT (2 IN.) 0.65 GAL/PI (4 IN.) = 1.5 GAL/FT (6 IN.)	5	gal./vol.						
☐ Surge Block	eximate Recharge Rage Gallons Removed	gpm gd gal.							
Well Development Criteria Met: Notes: Cood p charge - Strong PIN-Head space - 7 1261 p wo Proclust world-	<i>pm</i>	Well water clear to Sediment thicknes well is <1.0% of s Turbidity < 5NTUs ±10% change in fi	ss remaining in creen length s	Yes No					
	-	±10 % Change in ii	elu parameters	يم ت					
End of Well Development Sample (1 pint) Collected?	Yes No								
Water Parameter Measurements									
Record at start, twice during and at the end of developme	·	Conductance							
Time Volume Total Gallons pH	(Units) Temp. (OC)		urbidity (ntu) Pi	umping Rate					
Annual Control of the	.88 70.7	1.52	319 -	1 000 9					
912 3 30 6	70.9	2,33	110						
925 4 50 6,	38 20.9	72	306						
936 5 55 6	39 20.7	4.16	<u>95</u> -						
946 6 80 6.	35 70.8	4,41	37	\mathcal{H}					
Well Developer's Signature Harding ESE									
9912003(d)	/			-					

FIELD DATA RECORD - WELL DEVELOPMENT									
Project: Remedial Investigation	Well Installation Date:	11-14-01		Project No. 52985					
Client: SAEP	Well Development Date: 12/461 Logged by:								
Well/Site I.D.: HESE-01-16I									
Well Construction Record Data:	Well Diamet	er 2 in.	Start Time:	Finish Time:					
Bottom of Screen Sediment Sump/Plug ft. Fr	om Ground Surface 🗅 Fr		ic V						
Screen Length ft.	Fluids Lost during Drilling	gal.							
Protective Casing Stick-up Fluith ft. Protecti	ve Casing/Well Diff 0,4	9 ft. PID Rea	dings: Ambient A	O ppm					
Well Levels: Sedin	ment:								
	II Depth before Developmer	11.	(from top of PVC	;)					
End of Development 5.8 λ ft. We	Il Depth after Development	34,59 ft.	•						
24 Hours after Development 5.45 ft. Sec	diment Depth Removed	1.88.17 ft.							
HT of Water Column 29 ft. x a	0.16 GAL/FT (2 IN.) 0.65 GAL/PI (4 IN.) = 1.5 GAL/FT (6 IN.)	4.6	gal./vol.						
☐ Surge Block	oximate Recharge Rage Gallons Removed	70 gpm							
Well Development Criteria Met:	5			Yes No					
Notes: of Very Strong Solver (PDD Head Space - 518 to 7100	0-	Well water clear t Sediment thickne well is <1.0% of s	ss remaining in	# 0 # 0					
	1	Turbidity < 5NTU: ±10% change in f	s `						
Good recttoge	and a second section of the first of the second	±10 % change in 1	eig parameters	<i>F</i> -					
End of Well Development Sample (1 pint) Collected?	Yes No								
Water Parameter Measurements	,								
Record at start, twice during and at the end of developme	·	Conductance	Sould table to the state of the						
Time Volume Total Gallons pH	(Units) Temp. (°C)	2071	Turbidity (ntu) Pi	umping Rate					
1323 2 15	17.9	3,32	958						
3 30 6	152 17.9	3.39	169						
	17.9 40mm 17.8	3.63	40.6	_					
1401 5 60	153 17.8	3.66	17,5						
Well Developer's Signature	M		carrenos como anterior actual de la carreno						
9912003(d)			———На	rding ESE-					

FIELD DATA RECORD - WELL DEVELOPMENT								
Project: Remedial Investigation Well Installation Date:								
Client: SAEP	Well Development Date: 121461	Logged by:	Checked by:					
Well/Site I.D.: HESE -01- 17 I	Weather: Suny, 500	Start Date:	Finish/Date:					
Well Construction Record Data: Bottom of Screen	Well Diameter 2	in. Start Time:	Finish Time:					
Sediment Sump/Plug ft. Fr	om Ground Surface From Top of Rise	er 🔾						
Screen Length ft.	Fluids Lost during Drilling	gal.						
Protective Casing Stick-up Full Hus Hett. Protection	ve Casing/Well Diff ft. PID	Readings: Ambient A Well Mout	O ppm					
Well Levels: Sedin								
Initial 3.83 ft. We	II Depth before Development 27, 30	(from top of PVC	D)					
End of Development 26,35 ft. We	Il Depth after Development 27,33		•					
	liment Depth Removed 0 403	ft.						
HT of Water Column 23 ft. x \Box	0.16 GAL/FT (2 IN.) 0.65 GAL/PI (4 IN.) = 3,7 1.5 GAL/FT (6 IN.)	gal./vol.						
☐ Surge Block	Gallons Removed 26	gpm rehuse	2 I foot/ho					
Well Development Criteria Met:								
Notes: Very slow recitarge - W Purjum Pry - Will need to take	Well water of	ear to unaided eye ckness remaining in	Yes No □ Ži 'Sai □					
to Nobelep	■ Turbidity < 5	of screen length	\$\frac{1}{2} \text{\$\frac{1}{2} \text{\$\frac{1} \text{\$\frac{1} \text{\$\frac{1} \text{\$\frac{1} \text{\$\frac{1} \text{\$\frac{1}					
End of Well Development Sample (1 pint) Collected?	Yes No							
Water Parameter Measurements	•							
Record at start, twice during and at the end of development. Time Volume Total Gallons pH	Conductant		umping Rate					
<u> </u>	3.5	185 -	umping hate					
	169 1615 6.90							
	128 16,7 13,1 TO 16,7 13.9	99.5	1					
Well Developer's Signature			arding ESE					

9912003(d)

FIELD DATA RECORD - WELL DEVELOPMENT								
Project: Remedial Investigation Well Installation Date:								
Client: SAEP	Well Development Date: 12/460	Logged by:	Checked by:					
Well/Site I.D.: HESE -01-17D	Weather: Sunny, 550	Start Date:	Finish Date:					
Well Construction Record Data: Bottom of Screen Aa.3 ft.	Well Diameter 2	in. Start Time:	Finish Time:					
Sediment Sump/Plug Oft. Screen Length ft.	Fluids Lost during Prilling	gal.						
Protective Casing Stick-up	ve Casing/Well Diff. ft. PID	Readings: Ambient A	O ppm					
Well Levels: Sedir	nent:							
l.	II Depth before Development [1] 13.73		C)					
24 Hours after Development Se	Il Depth after Development (1,3,3)							
0.16 GAL/FT (2 IN.)								
1 7 7 7 161 1	0.65 GAL/PI (4 IN.) = 19 1.5 GAL/FT (6 IN.)	gal./vol.						
☐ Surge Block	College Removed	pm gal.						
Woll Dovolonment Criteria Met								
Notes: Good retage - PID 12/05/01 Repumped with what	cackpae= 12-14/1 Well water cl	ear to unaided eye	Yes No					
set torbity down. Removed 2	Turbidity < 5l	ckness remaining in of screen length NTUs in field parameters						
Fred N+450, (See 11/12/01)	los book for details)		,					
End of Well Development Sample (1 pint) Collected?	Yes No							
Water Parameter Measurements	ont (minimum)							
Record at start, twice during and at the end of developm Time Volume Total Gallons ph	ent (minimum). Conductance (Units) Temp. (OC) (m/s/cm/)		umping Rate					
	637 140 186 6159 14,2 30.3	Over -						
1013 3 45 6	270 145 30.5	7/3						
	14.8 30.4 14.8 30.8	- 412 -						
	15.4 30.7	379	+					
	180 Mig 30.7	257						
Well Developer's Signature			arding FSE					

	A RECORD - WELL D	EVELOPMEN.		
Project: Remedial Investigation	Well Installation Date:	11-16-01		Project No. 52985
Client: SAEP	Well Development Date	12/4/01	Logged by:	Checked by
Well/Site I.D.: HESE-0 180	Weather: Sunny	220	Start Date:	Finish Date:
Well Construction Record Data:	Well Diam	neter 2 in.	Start Time:	Finish Time:
Bottom of Screen ft.	From Ground Surface	<u> </u>		1000
Sediment Sump/Plug ft.				
Screen Length ft.	Fluids Lost during Drillin	ng gal.		
Protective Casing Stick-up Flush ft. Pr	rotective Casing/Well Diff.),3 4 ft. PID Rea	Ambient A Well Mou	У рр
	Sediment:	1507		
Initial 5.12 ft.	Well Depth before Developn	# it.	(from top of PVC	D)
End of Development 4,90 ft.	Well Depth after Developme	11.	·	
24 Hours after Development 4,59 ft.	Sediment Depth Removed	0.25 ft.		
HT of Water Column LJH ft.	☑ 0.16 GAL/FT (2 IN.) □ 0.65 GAL/PI (4 IN.) = □ 1.5 GAL/FT (6 IN.)	-7	gal./vol.	
☐ Surge Block ☐ Bailer ☐ 2" ☐ ☐ Grundfos Pump 2" 4"	Total Gallons Removed	80 gal.		
Well Development Criteria Met: Notes: Good reHarge - SLight PTD Hackpale - 116 - 164 ppm Purgal with whole Pump End of Well Development Sample (1 pint) Collect	Yes No	■ Well water clear to Sediment thickness well is <1.0% of some Turbidity < 5NTU ±10% change in to the sediment of the sedimen	ss remaining in screen length s	Yes No S S D d d
Water Parameter Measurements Record at start, twice during and at the end of deve	Nonmont (minimum)			
Time Volume Total Gallons	pH (Units) Temp. (^O C			umping Rate
1418 1 S 1459 2 IF	6,30 15,9	<u>9,8</u> 9,2	611800	160
1512 7 2	6.37 15.6	$-\frac{10.4}{10.4}$	Overrage _	
15dF 7 3F	6.39 15.6	10.5	11.5	J
1538 5 50	6.40 15.6	10.8	76.7	
1554 65	6,40 15.3	9,8	26,4	(
Well Developer's Signature 19912003(d)	Juy			arding ES

FIELD DATA RECORD - WE	LL DEVLOPMENT				Page	(of)
Project: SAEP		Job Number:	52985	Date: 4	1-12-02	
Well I.D.: P2- TF-01	В	Activity Time: S	tart: 08:45	End: 09:1	5	
Date of Well Installation:	-21-02					
Well Depth ft. Scre	en Length: /O		ve Casing skup (from ground):	A ft. C	Protective asing/Riser Difference:	ft.
Pre-Development				,	•	
Depth To Water ft. (TOR):	Depth to Sediment:		Post- velopment n to Water (TOR):	ft.	Depth to Sediment:	ft.
Height of Water Column:	0.08 gal/ft (2 inch 0.16 gal/ft (2 inch X 0.65 gal/ft (4 inch 1.50 gal/ft (8 inch) \~3.9	Gallons/Volu	me	Total G	allons Purged
Purge Data	08:55	09:00	09:05	09:10	09:15	
Purge Volume, Gallons	10				END	
Temp, Degrees Celsius	_	17.6	17.6	17.6		
pH, units		6.8	6.8	6.8		
Specific Conductivity, n	s	23.7	23.3	23.7		
Turbidity, ntu		712	756	587		
Sample Observations Clear Colored Cloudy Turbid Odor						
Equipment Documentation			_			
Type of Pump:		Surg	e Technique:			
Size/Capacity of Pump:						
Pumping Rate: gal/min		Estir	nated Recharge F	Rate:	ft/min	
Notes: AT 10 Carrons, 1	RIESIAN FLOW	BECINS DUE	TO INCOMI	UG TOE.		
100 STOP PUMPING (ON WOLL AT 100	Lauons		DEVELUPED BY	1: BRADIEY	1 WAFOREST
					,	

FIELD DA	ATA RECORD – WELL I	EVLOPMENT				Page			
Project:	SAEP	J	lob Number:	52985	Date: 니	16-02			
Well I.D.: PZ-TF-02A Activity Time: Start: 15:3, End: (6:00									
Date of Well	Installation: 4-8-								
Well Depth (TOR): ft. Screen Length: / D ft. Stickup (from ground): Protective Casing Stickup (from ground): Protective Casing From Casing/Riser Difference: ft. Difference:									
Pre-Develo	oment								
Depth To Water (TOR):	ft. Dep			Post- velopment n to Water (TOR):	ft.	Depth to Sediment:	ft.		
Height of Wa Column:	Height of Water 1,1, ft. Y .0.65 gal/ft (4 inch) = 0.16 gal/ft (4 in								
Purge Data		15:31	15:37	15:38	15:48	16:00			
	Purge Volume, Gallons	START	2	2+10T	2+2075.	2+3 05.	2.5		
	Temp, Degrees Celsius		DRY	DRY	DRY	DRY	DRY		
	pH, units					(\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \		
	Specific Conductivity, ms						}		
	Turbidity, ntu			}	1	!			
·	Sample Observations Clear Colored Cloudy Turbid Odor								
Equipment	Documentation								
Type of Pum	np:		Surg	e Technique:					
Size/Capaci	ty of Pump:								
Pumping Rate: gal/min Estimated Recharge Rate: ft/min									
Notes: OBSERVED BY IZENE AUBE									
			,	Signature:					

FIELD DA	TA RECORD – WELL D	EVLOPMENT			,	Page/_ of/_
Project:	SAEP	J	lob Number:	52985	Date: 4	-16-07
Well I.D.:	PZ-TF-02 B	Ā	ctivity Time: S	tart: 15:00	End: /5:5	28
Date of Well	Installation: 4-8-	02				
Well Depth (TOR):	ft. Screen Le	ngth: j p	ft. Protecti	ve Casing Ckup (from ground):	//Ar ft. C	Protective asing/Riser ft.
Pre-Develop	oment					
Depth To Water (TOR):	ft. Dep Sedir	oth to nent:		Post- velopment n to Water (TOR):	ft.	Depth to Sediment: ft.
Height of Wa Column:	iter ~49 ft. X	0.16 gal/ft (2 inch) 0.65 gal/ft (4 inch) 1.50 gal/ft (8 inch)	~3.9	Gallons/Volun	ne 3	Total Gallons Purged
Purge Data		15:00	15:10	15: 14 ®		
	Purge Volume, Gallons	START	10			
	Temp, Degrees Celsius		12.6			
	pH, units		6.8			
	Specific Conductivity, ms		14.8			
	Turbidity, ntu		>999			
	Sample Observations Clear Colored Cloudy Turbid Odor					
Equipment	Documentation					
Type of Pum	p: WETERRA		Surg	je Technique:	SURGE WA	TERRA & TUBING
Size/Capacit	y of Pump:					
Pumping Ra	te: V/ gal/min		Estir	mated Recharge R	ate: f	t/min
Notes:	EQUIP. BRENCES DO LOCATION, DECIDE	WN ON HOR	1BA 4-22.	Due to 1	-061571cs of	F Getting to This
	LOGATION, DUCTOR	· o pouede		zo By Re		
			DEVELVE	,		
				Signature:	,	

FIELD DA	ATA RECORD – WELL I	DEVLOPMENT				Page	/_ of _/
Project:	SAEP	J	lob Number:	52985	Date: 4	1-16-02	
Well I.D.:	PZ-TF-03A	A	ctivity Time: S	tart: 14:23	End: 14:	50	
Date of Well	Installation: 4-10 - 4) 2-					
Well Depth (TOR):	ft. Screen Le	ngth: /O		ve Casing ckup (from ground):	A ft.	Protective Casing/Riser Difference:	ft.
Pre-Develo	pment					,	
Depth To Water (TOR):		oth to ment:	ft. Dept	Post- velopment h to Water (TOR):	ft.	Depth to Sediment:	ft.
Height of Wa Column:		0.08 jel/ft. 0.16 gal/ft (2 inch) 0.65 gal/ft (4 inch) 1.50 gal/ft (8 inch)	~1.1	Gallons/Volume	9	Total G	Gallons Purged
Purge Data		14:23	14:26	14:36	14:38	14:48	14:50
	Purge Volume, Gallons	STANLT	2 GM		DRY		DRY
	Temp, Degrees Celsius		DRY	14.2		14.2	
	pH, units		('	6.9		6.7	
	Specific Conductivity, ms			21.1		20.1	
	Turbidity, ntu			>999		>999	
	Sample Observations Clear Colored Cloudy Turbid Odor						
Equipment	Documentation						
Type of Pun	np:		Surg	ge Technique:			
Size/Capaci	ity of Pump:						
Pumping Ra	ate: gal/min		Esti	mated Recharge Ra	te:	ft/min	
Notes:	DEVELO	PED BY RI	ENE ANBE				
				Signature:			

FIELD DA	TA RECORD – WELL D	EVLOPMENT				Page				
Project:	SAEP	J	lob Number:	52985	Date: 4	16-02				
Well I.D.:	PZ-TF-03	B	activity Time: Si	art: 13:40	End: 14:1	5				
Date of Well I	Installation: 4-10- 68									
Well Depth (TOR): Protective Casing Stickup (from ground): Protective Casing A ft. Difference: Protective Casing/Riser Difference:										
Pre-Develop	ment					•				
Depth To Water (TOR):	ft. Dep Sedir	oth to nent:		Post- velopment n to Water (TOR):	ft.	Depth to Sediment:	ft.			
	اِ	0, de gal./ft.		• ,						
Height of War Column:	ter ~ 49 ft. X	0.16 gal/ft (2 inch) 0.65 gal/ft (4 inch) 1.50 gal/ft (8 inch)	~3.9	Gallons/Volume	3:	5 Total	Gallons Purged			
Purge Data		13:50	13:55	14:00	14:05	14:10	14:15			
	Purge Volume, Gallons	10	15	20	25	30	35			
	Temp, Degrees Celsius	12.4	12.3	12.4	12.4	12.5	12.4			
	pH, units	7.1	7.0	7.0	7.0	7.0	7.0			
	Specific Conductivity, ms	16.9	16.7	17.3	14.3	13.6	15.1			
	Turbidity, ntu	>999	7999	>999	>999	7999	>999			
]]] [Sample Observations Clear Colored Cloudy Turbid Odor									
Equipment I	Documentation									
Type of Pum	P: WATERRA E	TUBING	Surg	ge Technique:	SURGING W	MITTERA				
Size/Capacit	y of Pump:									
Pumping Rate: v1 gal/min Estimated Recharge Rate: ft/min										
Notes:		DEVELOPE)	BY RENE	AUBE						
				Signature:						

FIELD DA	TA RECORD – WELL D	EVLOPMENT				Page	/ of /			
Project:	SAEP		Job Number:	52985 -	02 Date: 4	4-13-02				
Well I.D.:	PZ-TF-04B		Activity Time:	Start: 0 8,00	End: 08:	30				
Date of Well Installation: 3-25-02										
Well Depth (TOR):	ft. Screen Le	ngth:		tive Casing ickup (from ground):	//A ft. (Protective Casing/Riser Difference:	ft.			
Pre-Develor	oment									
Depth To Water (TOR):	Tt. Sedir			Post- evelopment th to Water (TOR):	ft.	Depth to Sediment:	ft.			
Height of Wa	tor [0.08 gal/ft (2 inch 0.16 gal/ft (4 inch 0.65 gal/ft (4 inch 1.50 gal/ft (8 inch) 124	Gallons/Volu	ume	Total (Gallons Purged			
Purge Data		0805	08:10	υδ:1 5	08:70	08:25	08:30			
	Purge Volume, Gallons	4	9	14	~19	~ 24				
	Temp, Degrees Celsius		12.9	12.9	12.9	12.9	12.9			
	pH, units	_	6.5	6,5	6.5	4.5	6.5			
	Specific Conductivity, ms		17.3	16.0	15.7	15.8	16.3			
	Turbidity, ntu	_	>999	7999	7999	7999	>999			
	Sample Observations Clear FLOWING Colored Cloudy Turbid Odor	V. CLEAR,	4T 08:30-	NTU's high	due 70 Se	diment in	Flow-Thru cell.			
Equipment	Documentation									
Type of Pun	np: FOOT VALVE		Sur	ge Technique:	SURGE W	FOOT VALUE	z ż Tubwą			
Size/Capaci	ty of Pump:									
Pumping Rate: gal/min Estimated Recharge Rate: ft/min										
Notes:	4T ~ 08:10, PIEZ	OMETER EX	hibits ARTE	SIAN FLOW	-710E 15 GC	MING IN.	570p			
'	MANUALLY PLEAGING									
	Flow UNDER ANTE	SIAN CONDITT	ions 2 / GA	-/min.			y LAFOREST			
7	a			Signature:						

FIELD DA	ATA RECORD – WELL D	EVLOPMENT			Page / of /
Project:	SAEP	Job Numb	er: 52985	Date: 4-16-	02
Well I.D.:	PZ-TF-05 A	Activity Tim	ne: Start: 09:44	End: /0://0	
Date of Well	I Installation: 4-9-02				
Well Depth (TOR):	ft. Screen Le		Protective Casing Stickup (from ground):	N/A ft. Casing	ective /Riser ft. ence:
Pre-Develop Depth To Water (TOR): Height of Water Column:	ft. Deg Sedir	0.089d/ft.] 0.16 gal/ft (2 inch) =	Post- Development Depth to Water (TOR):	nt. Sedi	pth to ment: ft. Total Gallons Purged
Purge Data		09:44 69:4	6 69:57	10:07	
	Purge Volume, Gallons	START DRY	V.5 ~1.6	~/.6	
	Temp, Degrees Celsius	DRY	DRY	DRY	
	pH, units				
	Specific Conductivity, ms)	
	Turbidity, ntu		1		
	Sample Observations Clear Colored Cloudy Turbid Odor				
Type of Pun	por coperty y rou	biNG	Surge Technique:	SURCE É PUMP W,	/ WATERRA
Size/Capaci Pumping Ra			Estimated Recharge	Rate: ft/min	
Notes:	DEVELOPOI)	BY RENE ANBE	,		
		•	Signature:		

FIELD DA	ATA RECORD – WELL D	DEVLOPMENT				Page	/ of /		
Project:	SAEP	J	ob Number:	52985	Date: 4	-16-02			
Well I.D.:	PZ- TF-05 B	A	ctivity Time: St	art: 09:03	End: 09:	43			
Date of Well Installation: $4-9-02$									
Well Depth (TOR): ft. Screen Length: / O ft. Stickup (from ground): Protective Casing Stickup (from ground): Protective Casing Protective Casing/Riser Difference:									
Pre-Develo	oment								
Depth To Water (TOR):	Water ft. Depth to H. Depth to Water ft. Sediment: ft. Sediment:								
Height of Wa Column:	ntor [0.08 fel-/fe. 0.16 gal/ft (2 inch) 0.65 gal/ft (4 inch) 1.50 gal/ft (8 inch)	~3.9	Gallons/Volur	me e	Total G	allons Purged		
Purge Data		09:16	09:25	09:35	09:43				
	Purge Volume, Gallons	100			20				
	Temp, Degrees Celsius	12.4	13.(12.9	12.3				
	pH, units	4.8	4.8	6.8	6.8				
	Specific Conductivity, ms	13.1	12.3	12.3	12.9				
	Turbidity, ntu	7999	>999	7999	>999				
	Sample Observations Clear Colored Cloudy Turbid Odor								
Equipment	Documentation			-					
Type of Pum	np: WATERRA & TU	BING	Surg	e Technique:	Surawa u	y Pump =	TUBING		
Size/Capaci	ty of Pump:								
Pumping Rate: gal/min Estimated Recharge Rate: ft/min									
Notes:	ARTESIAN FLOW . PUMP.	Coming out	of were	PIEDOME	TER FASIET	2 THAN DU	MP CAN		
	•			DEVELOPEN	. By Rene	ANBE			
				Signature:					

FIELD DA	TA RECORD – WELL I	DEVLOPMENT				Page	_/_ of _/			
Project:	SAEP		Job Number:	52985 ~0	2 Date: ゴー	5-02				
Well I.D.:	PZ-TF-06E	3	Activity Time: S	tart: 10:05	End: //:	05				
Date of Well Installation: 3 - 17 - 02										
Well Depth (TOR):										
Pre-Develor	oment			_						
Depth To Water (TOR):	Sedii			Post- velopment h to Water (TOR):	ft.	Depth to Sediment:	ft.			
Height of Wa		0.08 jel/fe 0.16 gal/ft (2 inch 0.65 gal/ft (4 inch 1.50 gal/ft (8 inch	1 24	Gallons/Volur	me 1	4 Total	Gallons Purged			
Purge Data	TIME	10:17	10:30	10:42	10:56	11:02	11:05			
	Purge Volume, Gallons	5	10	15	~21	~23	~ 24			
	Temp, Degrees Celsius	_		-	12.8	13.1	13.1			
	pH, units	_	_		6.9	6.9	6.9			
	Specific Conductivity, ms	-			13.7	12.6	12.6			
	Turbidity, ntu	-	· .	V. TURBID	7999	7999	7999			
	Sample Observations Clear Colored Cloudy Turbid Very Odor	Birck Birck Earle : Ture	B.D Colo.	Buch 2 - almos	t block					
Equipment Documentation Type of Pump: FOOT VALVE & TUBING Surge Technique: HAND SURGING, FOOT VALVE & THBING Size/Capacity of Pump: Pumping Rate: 40.4 gal/min Estimated Recharge Rate: ft/min										
Notes:	Notes: Equipment steam cleaned after use-									
	Signature: More D. Longly									

FIELD DA	ATA RECORD – WELL I	DEVLOPMENT				Page	/_ of	(
Project:	SAEP		Job Number:	52985	Date: 4	-15-02		,
Well I.D.:	PZ-TF-071	k /	Activity Time:	Start: 14:48	End: 15:	34		
Date of Well	Installation: 4-1-0 a							
Well Depth (TOR):	ft. Screen Le	ength: / O		ive Casing ckup (from ground):	/A ft. (Protective Casing/Riser Difference:	ft.]
Pre-Develop Depth To Water (TOR): Height of Water Column:	ft. De Sedi	oth to ment: 0.08 gcl./fc. 0.16 gal/ft (2 inch 0.65 gal/ft (4 inch	T. Dep	Post- evelopment th to Water (TOR): Gallons/Volum	ft.	Depth to Sediment:	ft. Gallons Purged	
Purge Data		14:48	14:51	14:56	1458	15:14	15:16	15:3
	Purge Volume, Gallons	STAILT	1.5		2		2.5	
	Temp, Degrees Celsius		DRY	14.4	DRY	12.9	DRY	17.
	pH, units			6.7	(6.7	(6.7
	Specific Conductivity, ms			28.1		27.7		28.
	Turbidity, ntu		/	102		172	- (74
	Sample Observations Clear Colored Cloudy Turbid Odor							
Equipment Type of Pun Size/Capaci			Sur	ge Technique:				
Pumping Ra	ate: gal/min		Esti	mated Recharge R	ate:	ft/min		
Notes:	Well Keeps	puraing	DRY . TOT	AL OF ~ 2.	8 gallons	purce:	D.	
			•	DEVELOP	ed by Re	NE AUBE		
				Signature:		· · · · · · · · · · · · · · · · · · ·		_

FIELD DA	ATA RECORD – WELL D	EVLOPMENT				Page	/ of /			
Project:	SAEP		Job Number:	52985	Date: 4-	15-02	•			
Well I.D.:	P2-TF-07-B		Activity Time: St	art: //:25	End: (2:0	70				
Date of Well	Date of Well Installation: 4-1-02									
Well Depth (TOR):	ft. Screen Le	ngth: 10		ve Casing kup (from ground):		Protective asing/Riser Difference:	ft.			
Pre-Develo	pment					•				
Depth To Water (TOR):	Water ft. Sediment: ft. Depth to Water ft. Sediment: ft.									
Height of Wa	ater ~ 48 ft. X	0.08 gel/ft (2 inch) 0.16 gal/ft (2 inch) 0.65 gal/ft (4 inch) 1.50 gal/ft (8 inch)	1238	Gallons/Volum	me 🥳	<i>Lo</i> Total Ga	llons Purged			
Purge Data		11:32-	11:37	11:42	11:51	12:00	NAMES OF STREET, STREE			
	Purge Volume, Gallons	10				ಎಂ				
	Temp, Degrees Celsius	12.5	12.4	12.4	12.5					
	pH, units	6.9	6.9	7.0	7.0	·				
	Specific Conductivity, ms	18.6	12.0	12.7	12.3					
	Turbidity, ntu	7999	102	133	157					
	Sample Observations Clear Colored Cloudy Turbid Odor	Very sirty								
Type of Pun	Equipment Documentation Type of Pump: FOOT VALUE & TUBING (WATTERA) Surge Technique: SURGING OF WATTERA & TUBING Size/Capacity of Pump:									
Pumping Ra	Pumping Rate: vo, 7 gal/min Estimated Recharge Rate: ft/min									
Notes: DEVELOPED BY RENE AUBE										
				Signature:						

FIELD DA	ATA RECORD – WELL D	DEVLOPMENT				Page	(_ of _/				
Project:	SAEP	Job	Number:	52985	Date: 4	-15-02					
Well I.D.:	PZ- TF-08 A	Activ	vity Time: S	tart: /4:00	End: 14:	31					
Date of Well	Installation: 4-3-02	2									
Well Depth (TOR): TOR Ft. Screen Length: O ft. Protective Casing Stickup (from ground): N/A ft. Protective Casing/Riser ft. Difference:											
Pre-Develo	oment										
Depth To Water (TOR):	ft. Dep Sedir	oth to ment:		Post- velopment n to Water (TOR):	ft.	Depth to Sediment:	ft.				
Height of Wa	ater ~ 14 ft. X	0.05 yel./ft. 0.16 gal/ft (2 inch) = 0.65 gal/ft (4 inch) 1.50 gal/ft (8 inch)	∿1./	Gallons/Volume	e 4.	5 Total Gal	llons Purged				
Purge Data	1.17 (2000)	14:00	14:08	14:19/14:20	14:29	14:31					
	Purge Volume, Gallons		~3	~4		4.5					
	Temp, Degrees Celsius				12.2						
	pH, units				6.7	·					
	Specific Conductivity, ms				34.4						
	Turbidity, ntu		2 2 20		58.2						
	Sample Observations Clear	<i></i>	MAN PED DRY	Pumper DRY		DUMPED/DRY					
	Cloudy										
	Turbid										
	Odor										
Equipment	Documentation										
Type of Pum	ıp:		Surg	e Technique:							
Size/Capaci	ty of Pump:										
Pumping Rate: gal/min Estimated Recharge Rate: ft/min											
Notes:	TOTAL 4.5	GALLONS DURG	e)								
	DEVELOPED	GALLONS PURG BY RENE AUE	sE								
		•									
			Signature:								

FIELD DA	ATA RECORD – WELL I	DEVLOPMENT				Page /	of (
Project:	SAEP		Job Number:	52985	Date: 4	-15-02				
Well I.D.: P2-TF-08B Activity Time: Start: 13:17 End: 13:42										
Date of Well	Il Installation: 4-3-0	2								
Well Depth (TOR):	ft. Screen Le	ngth: 10	ft. Protecti	ve Casing ckup (from ground):	√/ ₄ ft. C	Protective casing/Riser Difference:	ft.			
Pre-Develor Depth To Water (TOR): Height of Water Column:	ft. Der Sedir	0.08 gol/ft. 0.16 gal/ft (2 inch 0.65 gal/ft (4 inch 1.50 gal/ft (8 inch	Depti	Post- velopment h to Water (TOR): Gallons/Volu	ft.	Depth to Sediment: Total Gallor	ft. ns Purged			
Purge Data		13:27	13:37	13:37	13:42		######################################			
	Purge Volume, Gallons	10			೨೦					
	Temp, Degrees Celsius	12.3	12.7	12.2	12.7					
	pH, units	6.8	6.7	6.7	6.7					
	Specific Conductivity, ms	14.8	14.4	15.1	14.3					
	Turbidity, ntu	303	513	7999	7999					
	Sample Observations Clear Colored Cloudy Turbid Odor									
Equipment	Documentation									
Type of Pun	np: WATTERA & T	ัน ฿เ มน์	Surg	e Technique:	Surging e	OF WATTERA ?	TUBWG			
Size/Capaci	ity of Pump:									
Pumping Rate: \[\sigmu/.3 \text{gal/min} \] Estimated Recharge Rate: \[ft/min \]										
Notes:				,						
		DEVELOR	PEN 34 12	ENE AUBC	ī					
	Signature:									

FIELD DATA RECORD – WELL DEVLOPMENT							
Project: SAEP Job Number: 52985 Date: 4-13-02							
Well I.D.: P2-7F-09 A Activity Time: Start: 09:35 End: 09:55							
Date of Well Installation: 4-4-07							
Well Depth (TOR): To Fit. Screen Length: O fit. Protective Casing Stickup (from ground): N A fit. Protective Casing/Riser Difference: Fit. Fit. Protective Casing/Riser Difference: Fit. Protective Casing/Riser Differ	,						
Pre-Development							
Depth To Water (TOR): Depth to Sediment: ft. Depth to Depth to Water (TOR): Post-Development Development ft. Depth to Water (TOR):							
0.08 gel./ft.							
Height of Water Column: 0.16 gal/ft (2 inch) = X 0.65 gal/ft (4 inch) 1.50 gal/ft (8 inch) O.16 gal/ft (2 inch) = Gallons/Volume Total Gallons Purged							
Purge Data 69:35 69:45 69:55							
Purge Volume, Gallons / QT. DRY DRY							
Temp, Degrees Celsius DR4 (
pH, units							
Specific Conductivity, ms							
Turbidity, ntu							
Sample Observations							
Clear							
Colored							
Turbid							
Odor							
Equipment Documentation							
Type of Pump: Surge Technique:							
Size/Capacity of Pump:							
Pumping Rate: gal/min Estimated Recharge Rate: ft/min							
Notes: OBSERVED BY RENE ABBE							
Jamosed - Subsequenty							
This pingoneter was domoged - Subsequently Replaced on 5-6-02 Signature:							

FIELD DA	TA RECORD – WELL D	DEVLOPMENT				Page	_/_ of _/_			
Project:	SAEP		Job Number:	52985	Date: 4-	17-03-				
Well I.D.:	PZ-TF-09B	A	Activity Time:	tart: /0:00	End: عزر عرا	5				
Date of Well	Date of Well Installation: 4-4-07									
Well Depth (TOR):	ft. Screen Le	ngth: / 0		ive Casing ckup (from ground):	W/A ft. C	Protective asing/Riser Difference:	ft.			
Pre-Development										
Depth To Water (TOR):	ft. Deş Sedir	oth to ment:		Post- velopment h to Water (TOR):	ft.	Depth to Sediment:	ft.			
Height of Wa Column:	ater	0.16 gal/ft (2 inch 0.65 gal/ft (4 inch 1.50 gal/ft (8 inch	1 24	Gallons/Volur	ne N3	/ Total G	Sallons Purged			
Purge Data		10:10	10:16	10:19	10:24	10:30	10:33			
	Purge Volume, Gallons	10	18	21	25 €	28	31			
	Temp, Degrees Celsius	12.7	12.6	12.8	13.0	13.0	13,0			
	pH, units	6.9	7.0	7.0	7.0	7.0	7.0			
	Specific Conductivity, ms	20.7	19.4	16.2	16.6	16.6	16.6			
	Turbidity, ntu	>999	>999	>999	47	47	47			
	Sample Observations Clear Colored Cloudy Turbid Odor									
Equipment	Documentation				-					
Type of Pum	np:		Sur	ge Technique:						
Size/Capaci	ty of Pump:									
Pumping Ra	Pumping Rate: gal/min Estimated Recharge Rate: ft/min									
Notes:	Notes: & WELL BEGING TO RUN FREDLY - ARTESIAN FLOW - STOP PUMPING/PURGING AT 10:24									
i	419H TIDES TODAY A			This pig	5-8-02	damaged of	peplaced on			
	Low AT	: 10:05 22:13		Signature:						

FIELD DA	ATA RECORD – WELL D	EVLOPMENT				Page	(of)
Project:	SAEP		Job Number:	52985 -0	2 Date: 4-	10-02	
Well I.D.:	PZ- TF-10B	A	Activity Time: S	tart: 14:50	End: 15:	50	
Date of Well	I installation: 3 - 28 - 0	7					•
Well Depth (TOR):	ft. Screen Le	ngth: 10		ive Casing ckup (from ground):	A ft. C	Protective casing/Riser Difference:	ft.
Pre-Develor Depth To Water (TOR): Height of Water Column:	ft. Deg Sedir	0.08 fol/fe 0.08 fol/fe 0.16 gal/ft (2 inch 0.65 gal/ft (4 inch 1.50 gal/ft (8 inch) = Dept	Post- velopment h to Water (TOR): Gallons/Volu	ft.	Depth to Sediment:	ft.
Purge Data		14:55	15:00	15:10	15:15	15:40	15:50
	Purge Volume, Gallons	5	10	15	20	25	30
	Temp, Degrees Celsius	13.7	<u> </u>	13.8	13.9	,	13.8
	pH, units	7.5	<i>-</i>	4.1	7.0		6.9
	Specific Conductivity, ms	37.6		30, 8	31.4	_	21.1
	Turbidity, ntu	7999	_	7999	7999	_	7999
	Sample Observations Clear Colored Cloudy Turbid Odor						
Equipment	Documentation			_			
Type of Pun	np: FOOT VALVE		Surg	ge Technique:	SURGE W/ FO	OT VALVE ?	TUBING
Size/Capaci	ity of Pump:						
Pumping Ra	Pumping Rate: ~ 0.5 gal/min Estimated Recharge Rate: ft/min						
Notes:					IEVELOPED I	,	,